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CHLORIDES OF LIME AND SODIUM.

Observations on the Chlorides of Lime and of Sodium, and Suggestions of some Forms of Application, &c. By Henry Belinaye.

It is not without astonishment we contemplate the little favor enjoyed by hygiene. On the continent of Europe it is the subject of particular study, and of general attention, and has given rise to many voluminous works of surpassing interest. Periodical publications are exclusively devoted to it ; councils and commissions of men of science are established everywhere purposely for its superintendence, and statesmen are deemed incapable, or neglectful of their duty, who do not devote a due proportion of time to its encouragement. The remarkable increase of longevity in England of late years is principally attributable to those improvements in hygiene which, although unsought for, have followed the advance of the inhabitants in comfort, because in a certain degree inseparable from it. But if any one should deem these improvements sufficient, let him read, were it only the index of the "*Annales de l'Hygiene*," and he will see the number of practical applications of science to the welfare of mankind which the public never hear of in England, although it is the fatherland of philanthropy. However, the scourge now approaching will be an imperative monitor in favor of public hygiene, to whose lore it directs us as emphatically as a statue in a cemetery points to the legend of a tomb. Public hygiene requires not only men of science to invent and suggest, but the great mass of the nation to read and co-operate ; and we must hope for the day when it will beneficially supplant that study of "Buchan" and the medicine chest, by which so many people drug themselves into disease, and not a few to death.

I hope these observations may be excused, though they may appear too grandiloquent, if considered only as prefatory to the humble suggestions I have to present ; and even the latter may be deemed supererogatory if the cholera be considered as neither contagious nor infectious. However, the great majority of men of science are of a different opinion, and of the justice of this opinion we shall but too soon have personal experience. In many places where this fearful traveller has arrived, he has appeared at first in disguise, and has deceived the inhabitants by his equivocal character. Perhaps the peculiar locality, or the unfavorable season, has prevented his epidemical and contagious nature from appearing distinctly. But, after a certain time of incubation, when warmer and more relaxing winds have begun to prevail, he has rushed forth in all his epidemical fury, and falling upon some class of men of defective vitality, caused either by depravity or poverty, has revealed all his contagious banefulness.

Of all the chemical agents that have been employed to destroy effluvia, none can compete with the chlorides of sodium, lime, and potash. It is not, therefore, surprising, that on the appearance of cholera in Europe, that truly praiseworthy chemist, Labarraque, should have been applied to on the subject of his antiseptic process. Labarraque advises two glasses of water to be daily given, containing from thirty to forty drops of chloride of sodium ; the hands and face to be washed with a solution of it ; baths, with six or eight ounces of the liquid chloride in each ; plates, containing the antiseptic liquor or powder, to be placed at the doors and on the mantel-pieces ; and curtains of coarse linen to be hung before the windows, which are to be kept moistened with the chloride. Desirous of promoting this mode of purification, I wish to recommend some precaution in its use, and next some more convenient forms of application.

The chloride which is evolved in the manner above recommended—a destroyer of colors, odors, and effluvia, in its unmixed state is also a destroyer of life. We know how rapidly an animal dies when immersed in a vessel of chlorine gas. We have also the examples of an English physician who died of a disease of the lungs occasioned by his experiments on this gas, and of several chemists who have suffered from the same cause. Although chlorine has been employed in the treatment of some diseases of the lungs, and although when diffused in a small proportion in the air it has not appeared deleterious, not only it cannot but deteriorate in some degree the natural atmosphere of respiration, but when employed in the abundant manner recommended above, we may fairly suppose that it may become highly deleterious, particularly to persons very young, very old, or very weak. We may suppose this to be the case even when no palpable effects are immediately produced, for may it not oppress the powers of life, just as we see in houses either situated in a low or marshy locality, or near the common sewer, the miasmata slowly destroy the inhabitants, perhaps without producing even one single well characterized attack of fever ?

To obviate, as far as possible, these objections, we would recommend the following measures:—Whenever it is desired to cleanse a house, or a room, of effluvia or impurities, a large quantity of one of the chlorides should be placed in the most favorable state for the evolution of the gas. Everybody should then withdraw, taking care to remove all the colored articles of furniture, gilt frames, &c. liable to be injured, and the doors and windows be shut as hermetically as possible. Thus the place will be more speedily purified ; and doors and windows being thrown wide open after a due lapse of time, no person's health will be injured. When, on account of the presence of the sick in the same room, or in the same house, a constant evolution of gas is required, flat dishes full of the chlorides should be put only where there are the greatest currents of air, placing the dishes in as high a situation as possible ; as it has been found that otherwise the gas, which is heavier than the atmosphere, will not mix sufficiently with the air, and only lie in a more concentrated stratum on the floor. If, from time to time, there is a suspicion of too large a proportion of chlorine existing in the room, let a little liquor ammonia be thrown on the floor, and the rising of a white vapor will reveal the existence of an excess.

When you walk through an infected place, or approach a person laboring under a highly contagious disease, it has been recommended to keep a handkerchief to the mouth, wetted with the disinfecting liquid. This obstructs the speech, whilst the gas inconveniences the lungs, and the protection is liable to be removed in incautious gesticulation. I have had a simple contrivance made to send abroad ; it has the advantage of leaving the speech free, and of being a protection from deleterious emanations, without depriving the lungs of communication with the usual atmosphere. This mask consists of a wire coming from the back of the head to project before the mouth, where it terminates in a ring, furnished with points, to which a sponge dipped in a solution of chloride of sodium may be attached. A thin and short band of brass crosses the wire, and fixes this simple apparatus to the head immoveably. Being elastic, this mask fits the head of every adult, and may be put on and taken off in a second by each person going into the sick room, and causes no inconvenience in any movement of head or body. Besides its use in contagion, its adoption would save the lives of nightmen, who often sink in their disgusting duty.

Salts containing an excess of acid, when mixed in the dry state with chloride of lime, cause the slow evolution of gas by a new combination that arises. Mr. Garden, whom I have consulted on the subject of this letter, and whose chemical acumen often rests on ingenious minutia from more important pursuits, has had the kindness to construct a smelling bottle containing a powder of the above description. Hung by a ribbon round the neck, the heat of the body will favor the evolution of the gas when the stopper is removed. A more effective protector than camphor and other agents carried on the person, this precaution will not alarm the sick friend or the patient. Should the cholera, or any other contagious disease, become very virulent, the medical attendant might wear cotton gloves, with the end of index and next finger of the right hand cut off. The gloved hands being dipped in the disinfecting solution, the pulse, or any other part of the body of the patient, might be examined without fear, the gravity of the fluid making it constantly flow to the apices of the exposed fingers. Nurses may wear oil-skin gloves, and an oil-skin smock-frock, closing hermetically round the throat, wrists, and over the chest.

Besides the chlorides many other " disinfectants " exist, and not a few of these whose source of power must remain concealed. It would appear that most bodies that emit strong odors possess a virtue against contagion. The cholera has had little influence in places where the forests in the neighborhood have spontaneously ignited, and the wood has remained smouldering over the fire. It will be said, perhaps, that here heat and the pyroligneous acid have played important parts ; but manufactories of snuff have been untouched by the cholera raging around, so that smoking has been enjoined in despotic countries where it was previously forbidden. Nor have examples been fewer during epidemics of the plague, where the centre of the town, the vicinity of the most nauseous trades, have remained free from the pestilence raging around. Therefore, the general confidence in the fumes of acetic acid, when not carried too far, is not without some reason for its support. To meet the wish of some friends to possess an antiseptic of this description, I have applied the acetic ether to the beautiful philosophical fumigator first imagined in Germany, and now manufactured in this country by Mr. Garden. It is constructed on the knowledge of the singular and well known fact, that a platinum wire once ignited, remains in this state as long as it is held over spirit or ether. Thus a platinum filagree, appended to a glass rod that dips into a scent bottle full of acetic ether, may be made to diffuse it in the form of a very agreeable and exhilarating vapor throughout the room of an invalid.

ULCERATED NÆVUS.

A Case of Ulcerated Nævus, successfully treated by the New Operation.

By Marshall Hall, m.d. f.r.s.e. &c. &c.

Mr. Heming, to whom I am already so deeply indebted, has again afforded me an opportunity of observing the effect of puncture in the cure of nævus. The case was doubly interesting from combining ulceration with the ordinary circumstances of that affection.

The tumor was oval, about one inch and a half in length, and three-fourths of an inch in breadth. The central part was undergoing the ulcerative process; around the ulcer the nævus existed in the form of a ring, about one-sixth of an inch in breadth. The edges of the ulcer were ragged, and slightly phagedenic; the surface of the ulcer was *mali moris,* and had bled from time to time. The nævus rose about an eighth or a tenth of an inch above the surface of the skin.

A common broad needle, with cutting edges, was passed through the substance of the nævus, at its base, and under the ulcer, from side to side, in every direction. Several punctures were made, but one would have been sufficient.

In the course of one week the ulcerative process had undergone the most interesting change into the adhesive. No better or more beautiful illustration could be presented of the *Hunterian* doctrines. The ragged edges became smooth and white; the ulcerated surface covered with a film of coagulated lymph. In a few days more the whole ulcer was completely healed.

As a much slower process, the deposit of coagulable lymph encroached on the edges of the remaining ring of nævus, which in the space of one month had become reduced to one-third its original breadth.

At this period it was thought right, in order to accelerate the process of obliteration, to repeat the operation. But on examination, the process of obliteration of the ring of nævus was going on so beautifully that we determined to leave it for daily observation.

The deposit of coagulable lymph, with obliteration of the vessels, gradually encroached upon the ring of nævus, and destroyed its redness and tumor. Each successive week induced an obvious change. The whole process was so distinct, and so peculiar, that, however a shade of doubt might be cast upon the former case, none could possibly subsist in regard to the nature of the cure in this.

That every kind of vascular nævus, and even some tumors, morbid growths, and ulcers, may be cured by this simple operation, I have no doubt. A mode of obliterating vascular texture, and of changing vascular action, must have numerous applications in surgery. I have thought it, therefore, incumbent upon me once more to draw the attention of the profession to this subject.

MAGNESIA.

On Varieties of Magnesia. By William West.

In the Medical Gazette of August 13th, 1831, is a case of poisoning by sulphuric acid, by Martin Sinclair, M.D. Fellow of the Royal College of Surgeons of Edinburgh.

I request your insertion of a few remarks suggested by the following passage in the account, (vide Med. Gazette, August 13th, 1831, page 625, first column.) The passage is as follows :—" By medical writers the carbonate of magnesia is recommended in preference to the carbonate of lime, and is certainly superior by producing a saline aperient by combining with the sulphuric acid. In the present case, however, the carbonate of lime was preferred as having a greater affinity for sulphuric acid, *and because being more easily missible with liquids, it could be administered in greater quantities in a short space of time.*" This latter clause would indicate that the writer was acquainted only with the ordinary carbonate of magnesia of commerce, prepared from the residuary liquor of sea-water, after the extraction of common salt. This is light, mixes imperfectly with water, and occupies a large bulk even when mixed ; it has a taste which, though not very readily discoverable on placing a small quantity on the tongue, is to many disagreeable in a copious draught. This taste appears to depend in some degree on the presence of chlorides and sulphates of magnesia, lime, and soda, left behind in the process of washing the carbonate of magnesia. But since the nauseous flavor of sea-water is chiefly owing to dissolved animal and vegetable matters, and is scarcely perceived in water taken up at a great distance from any shore, I know from experiment so much of the readiness with which soluble, animal, and vegetable substances unite with and adhere to all the common earths, (I waive the question of a real combination,) that I should expect this flavoring matter, too minute and subtle, perhaps, to be at present detected by our chemical tests, to adhere to, and be precipitated with the carbonate of magnesia, rather than to remain dissolved, and be washed away. Certain it is that I do not find on analysis of light carbonate of magnesia so large a portion of muriates or sulphates as fully to account for its disagreeable flavor. But there is another carbonate of magnesia to be met with in trade which I have been in the habit of recommending and supplying, and which is approved, I believe, by all who have tried it : this is known as pure, or heavy carbonate of magnesia.

An ounce measure, lightly filled, weighs about 160 grains ; of the common sort, the same bulk weighs 48 grains. This heavy carbonate is free from taste; it is not prepared, in any stage, from sea-water, but from solution of sulphate of magnesia, free from lime, from muriates, and from vegetable bitter. There is another somewhat curious reason of trade for its closer approach to purity. Carbonate of magnesia, when first precipitated, is very white, and of course much mixed with the solution of the alkaline precipitant. Repeated washing, while it carries off the alkaline salt, breaks down that crystalline structure on which the lightness depends, and leaves it heavy. A few, and but a few generations back, carbonate of magnesia was many times its present price, so as to be worth adulterating with carbonate of lime; and, moreover, that ready and infallible test for chalk in such a mixture, its not dissolving entirely in moderately diluted sulphuric acid, was unknown, or in few hands.

Medical practitioners had then no easy way of judging of its freedom from adulteration with chalk but from its extreme lightness, and to procure it light rather than tasteless was the great desideratum of the laboratory.

Neither the spread of chemical knowledge, nor the example of Dr. Henry's superior preparation, has entirely abolished this prejudice, and hence the manufacturers of common carbonate of magnesia have a strong motive to wash slightly, in order to preserve that lightness which is now a real defect without a countervailing advantage. The manufacturers of pure, heavy carbonate of magnesia, who do not aim at lightness, have not this motive to spare washing, and their preparation is as much distinguished by mixing readily with liquids, and by freedom from taste, as it is by chemical purity. I think no one accustomed to its use could write, "carbonate of lime was preferred because more easily missible with liquids:" it is actually less so.

Two things I wish to guard against; first, the being supposed to possess any nostrum in magnesia, or to claim the exclusive source of supply for the heavy carbonate, or the calcined magnesia from it, although, in my own connexion amongst apothecaries, I am in the habit of furnishing them largely with this magnesia.

Next, the appearance of imputing any blame to the medical practitioner who treated the case. He seems to have acted with zeal and promptitude, and the same termination might have taken place under any other management; but I beg leave to point out a circumstance forming a reason for preferring magnesia, or its carbonate, to chalk, which he has not noticed, whether aware of it or not, and which *in other cases* is quite likely to make all the difference between *life* and *death*. It is, that from the comparative insolubility of sulphate of lime, when chalk is added to dilute sulphuric acid, however large the quantity of either, the action of the sulphuric acid on the carbonate, and its saturation with lime, soon stop, from the first portions of sulphate forming a crust round the carbonate, protecting it from the further action of the acid. Even agitation, without actual crushing, is insufficient to bring the whole of the carbonate of lime within the sphere of action of the sulphuric acid. There may exist together, therefore, in the stomach a great mass of carbonate of lime, enveloped and protected by sulphate of lime, and at the same time a large quantity of sulphuric acid, either kept wholly separate from, or very slowly acting on, the chalk, but exerting the full force of its deadly energies, chemical and physiological, on the structure or functions of the stomach, without check or control. With magnesia this cannot possibly be the case. I should recommend as the best preparation in every such case, if at hand, Henry's calcined magnesia, or the pure calcined magnesia obtained by calcining the carbonate above described, on account of avoiding distressing efforts at eructation in the corroded state of the œsophagus and surrounding parts. Next to these, pure heavy carbonate of magnesia, or even supercarbonate of soda, and chalk only as a temporary substitute, in cases occurring in the country, where chalk might be in the house, and a mixture could be prepared and administered whilst a messenger was on the way to the nearest place where some variety of magnesia could be obtained.

FUNGUS HÆMATODES OF THE BRAIN.

Case of Fungus Hæmatodes of the Brain, with long-continued Constipation of the Bowels. By James Laidlaw, Esq. Surgeon.

Samuel Kidman, fifty-eight years of age, by occupation a servant. His wife states that it was about two years ago he first complained of a severe fixed pain in the head, immediately over the left temple, which was attended with dimness of sight: these symptoms were relieved, for the time, by the abstraction of blood, by leeches, and by the application of blisters to the part. The attacks, however, became more frequent and of longer duration; the severity of the pain being greater, but still confined to the same spot. Some months after his first attack, he was observed one evening, while at tea, to hang down his head, with a stupid, vacant appearance of countenance, and, upon being spoken to, he was found to be nearly insensible: he was totally unconscious of the presence of his friends, and was with some difficulty (by shaking him and pulling him about) made aware of it. After that time, he frequently fell into the same comatose state, sometimes as often as eight or nine times in the course of a day; and the attacks of headach, giddiness, &c. returned almost daily. Still he had no paralysis, and, with the exception of a slight loss of appetite, was in tolerable general health, and attended to his domestic duties.

Thus he continued up to the beginning of last April, when one evening, while at tea, he was seized with a fit, which continued about twenty minutes, after which he became calm and tranquil as usual. He was not seen by his medical attendant during the continuance of the fit, but it appears, from the description of his friends, to have been of an epileptic rather than an apoplectic character. Leeches, and a blister, were afterwards applied to the head.

After a lapse of nine days, he had another fit of the same nature, which lasted about the same time, and from which he recovered as from the former. A fortnight after the occurrence of the second fit, he was seized with paralysis of the right side of the body, and with total loss of vision and the power of articulating: this occurred while he was shaving himself. The remedies which had been usually employed were again resorted to, but without any benefit; and he continued in this unhappy condition, suffering little, and often remaining for a day or two in a state of apparent insensibility, until the 11th of July, when he suddenly recovered the power of speech, and from his conversation it was evident his mental powers were unimpaired; but he was very weak, and was evidently sinking. On the 19th of July, he died. For several weeks previous to his death, he had taken very little nourishment, and for *nearly nine weeks* had had no evacuation from the bowels.

Sectio Cadaveris. Upon opening the head, the membranes on the surface of the brain were found in a perfectly healthy state, with the exception of a slight thickening and opacity of the arachnoid. The right hemisphere of the brain was quite sound and healthy; but, upon cutting into the left, the middle lobe of it was found converted into a mass of fungoid disease: it was considerably larger than natural, and, by pressing upon the petrous portion of the temporal bone, that bone had become partially absorbed, so as to expose the cavities of the ear. The arachnoid membrane, at the inferior part of the tumor, was so much thickened as to form a sort of sac holding the tumor together. No vestige of the left lateral ventricle could be discovered; nor was there any appearance indicating which had been the cineritious and which the medullary part of the brain. Upon removing the diseased mass, it seemed to melt away from the touch, and had a good deal the appearance of the tumor formed by a hernia cerebri. The arteries and nerves at the base of the brain were healthy. In the cavity of the abdomen, the large intestines were found choked up by the accumulations of hardened fæces. The liver was larger, and of a darker color than natural; the gallbladder was very much distended, and, upon cutting into it, was found to contain thirty-three gallstones, of the size of peas, and about three ounces of bile. The other viscera were healthy.

One of the most remarkable circumstances in this case was the extreme torpidity of the bowels, so that, for nearly nine weeks previous to his death, no evacuation could be procured. This must have arisen from their impaired nervous sensibility, in consequence of the disease of the brain, as there was no morbid appearance of the bowels themselves. There are two cases published by Dr. Baillie, in which no evacuation could be procured from the bowels, in the one for a period of fifteen weeks, and in the other twenty days; but the obstruction in both these cases was mechanically produced by stricture in the rectum.

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EFFECTS OF BREATHING IMPURE AIR.

It is a highly interesting question, and one which has scarcely received the attention it merits, what is the effect on the health of breathing for a long period an atmosphere vitiated by human respiration. The effect of actual confinement within a limited portion of air, in inducing rapidly fatal consequences, is sufficiently familiar. The symptoms, under these circumstances, plainly refer themselves to the organs which are principally concerned in conducting the process of respiration. The embarrassment and distress are immediately referred to the lungs; it is their functions which are impeded, and it is the gradual interruption of these, which induces the fatal effect. But the case is very different when the privation of fresh air is partial only, and arises from what is usually regarded as imperfect ventilation. In rooms which are ill supplied with fresh air, as for instance in working rooms, where numbers are collected, no immediate difficulty is ordinarily experienced which can be referred to the lungs. On first entering the room, perhaps some slight dyspnœa is felt; but this soon disappears, and the individual directly becomes so accustomed to the new medium, as scarcely to be aware that he is not breathing the purest atmosphere. The contrast is indeed very striking, when from such a medium he makes a transition to the purer air without; and the grateful sensation he then experiences, reminds him of the contaminated region from which he has emerged. In passing from a crowded assembly, as a public meeting, into the open air, and the reverse, the effect of this contrast cannot be mistaken. Even in exchanging the air of the country for that of the town the change is at once obvious and striking, and although in this case human respiration is not the only source of contamination, the influence from this cause is perfectly manifest. Yet in all these cases the difference between actually breathing the pure and the impure air, is by no means so obvious or apparent; and so far as the action of the lungs is concerned, the process seems to go on as well in the one as in the other. It becomes then a question of some interest, what are the effects, if any, of a contaminated atmosphere when breathed for a long period; and whether the same force of habit which reconciles us to the sensation, also fortifies the system against its influence, and renders it altogether innoxious.

This question can in some measure be resolved *a priori*, by considering the changes which the blood undergoes in its sensible properties from the contact of air, and likewise the purposes which it is destined to answer in the animal economy. As an obvious effect of atmospheric oxygen is to change the dark color of venous blood to a florid hue, it were natural to anticipate that where this principle is partially and imperfectly supplied, the color of the blood, wherever exposed to view, would be less bright than where it is abundantly furnished. Secondly, as it is the property of arterial blood to stimulate the heart and arteries, it might be supposed that one effect of impure air would be to produce a feeble action of the arterial system. Thirdly, as it is the office of the blood to supply nutrition to the system, it might well be expected that, if the necessary changes in its chemical constitution are not duly effected, the secretions must deteriorate in character, digestion be ill performed, the peristaltic action become sluggish, the growth of the various parts be checked, and a general debility of the system be induced. Now we do, in fact, find differences nearly corresponding to these between individuals differently situated in regard to supplies of fresh air. In comparing, for instance, the inhabitants of the town to those of the country, it is a common remark that the complexions of the former are less ruddy, thus indicating a want of florid blood in the capillaries; their digestion less powerful, manifesting that the system is not fully and rapidly nourished; and the pulse more feeble, showing a want of due vigor in the action of the heart. The effect of imperfect ventilation becomes far more striking when we remark the aspect of those, who, in the pursuit of their daily occupations, are enclosed in crowded and ill ventilated apartments. We notice at once their pale and dingy complexions, and the want of a due action on the surface; we find the muscular substance to be soft and flabby; the pulse feeble; the appetite impaired, the powers of digestion limited. Yet under all these circumstances, no actual disease appears to be induced, and individuals sometimes attain advanced age, having passed two-thirds of life in so foul and corrupt an atmosphere that to one entering it from abroad it seems absolutely intolerable. Even the diseases which occur in this class of persons are seldom of that violent and acute character which is seen in those whose circulation is active and vigorous; and those who might be judged from their aspect to be the victims of a slow marasmus, will yet profess to have enjoyed through life uninterrupted health. They have, in fact, no particular disease, and experience no sensation of suffering; but the body is not well nourished, the motions are slow, and the whole appearance torpid and sluggish.

These observations will perhaps seem vague; but their vagueness arises less from any want of reality in the objects described, than from the difficulty of describing by means of negative qualities. That there is a reality in the gradual influence of confined air, we are fully satisfied; and our observations on this subject are confirmed by those of others who have directed their attention to this subject. In a short but highly interesting memoir on the subject of miners, contained in a late number of the Edinburgh Journal, is described a state of constitution not differing except in degree from that just alluded to. The author commences by remarking the infrequency of acute disease of the lungs among this class of persons. He observes that miners are rather less liable to inflammatory complaints than other classes in the community, and that they have no particular tendency to morbific affections of the chest. It appears also that they experience no particular annoyance even when at work in mines where the deficiency of fresh air is very considerable; and that they attain in many instances to a considerable age. On the other hand, we are told that they complain of lassitude, debility, and drowsiness, and that they all become paler in complexion. The author's theory is, that while an excess of oxygen in the atmosphere is calculated to prove a stimulus and to excite inflammatory action, the deficiency of this principle will have the opposite effect; and while it depresses all the powers of the system, will prevent the occurrence of inflammatory disease. That with such a theory to maintain, he should have been disposed to swell the list of immunities enjoyed by those exposed to this antiphlogistic influence is natural enough; and it appears from other accounts that miners are not so much exempted from acute or chronic pneumonia as those who work in a purer atmosphere. The subject, however, of the gradual influence of impure air is in every view highly interesting; and we hope that others enjoying extensive opportunities of observation will be led to pursue it.

FACTS RESPECTING CHOLERA.

A very interesting discussion on the contagiousness of the Cholera recently took place in the Westminster Medical Society, among the members of which are many of the most eminent medical men in England. It lasted four evenings, and a minute account of it, on each evening, is given in the Medical Journals of London. At the last meeting, among the members who took part in the debate were Drs. James Johnson, George Gregory, and A. T. Thompson; Dr. Macleod, the former, and Dr. North the present editor of the Medical and Physical Journal. It appeared, at the termination of the discussion, that every member but one, was of opinion that the disease is contagious, in a greater or less degree.

Dr. Gregory, whose remarks are quite fully reported, treated the subject with clearness and ability. He dwelt upon and illustrated very amply, three facts as particularly illustrating the mode in which the disease is propagated; these were,

"*First*, its mode of travelling from country to country, and from town to town, invariably appearing first on the frontier next to an infected district, or if on an island, always first showing itself in a sea-port—in short, never being met with except where communication had been held with places in which it already prevailed. *Secondly*, the manner in which it frequently spread through the members of a family, or communicated itself to those who visited the sick, though residing in a different and distant locality. *Thirdly*, the immunity which had, in numerous well-authenticated instances, attended a rigid isolation, as at Peterhoff and Zarcozelo, where there were from 8 to 10,000 persons who remained unaffected, while it raged around them."

Dr. G. alluded to the circumstance, as worthy of note, that in all the Indian reports there is stated to have been one spot in every large town, which the disease either did not visit at all, or not until almost every other place had been decimated by it—that spot was the jail; and its immunity is attributed to the slight intercourse of its inmates with other inhabitants.—Another circumstance that produced a strong impression on his mind was, the particular course of the disease in Russia:—" the manner in which it travelled *up* the Wolga to the *north*, and then, crossing over to the Don near its source, pursuing a course diametrically opposite, namely, *down* that river to the *south;* thus travelling in two nearly parallel lines in contrary directions—a phenomenon perfectly intelligible if the plain straight-forward doctrine of its being carried by man were admitted, but wholly incomprehensible on any other."

Allusion was made to the fact that most of the English Physicians who had been zealous advocates for the non-contagiousness of the disease, have, on nearer examination of its progress, been convinced of its contagious character. Dr. Russell, *e. g.* went to Russia a non-contagionist, but has been satisfied that he was in error; Dr. Lowrie, who had seen the disease in India without suspecting it contagious, is convinced that it is so at present. Mr. Orton, author of a work on cholera, and a staunch non-contagionist, now comes forward and says that the arguments against contagion are "as dust in the balance"—such are his words—when placed against those that are now opposed to them. Dr. Johnson, of the Medico-Chirurgical, is now quite satisfied that the disease is contagious *under certain circumstances*, i. e. when a predisposition to it exists in the person exposed,—and what more can be said of the smallpox itself? Indeed, says Dr. G. "one would think it scarcely possible that two opinions *could* exist with regard to a question where the *Medical Gazette* and the *Lancet* embraced the same side, and were seen fighting under the same banner."

Referring to the exceedingly futile attempt so often made to prove the non-contagiousness of this disease, from the number of instances in which persons have been exposed to it, and yet escaped, Dr. Gregory remarks that "Calculations of the number who escaped might lead us to form some estimate of the proportion of mankind who are susceptible of the disease; but negative evidence can never, by any increase, disprove the positive results opposed to it. Yet this was the constant argument of the non-contagionists. Like the man tried at the Old Bailey for sheep-stealing — 'Ah! my Lord,' said he, 'if I had known that you would have condemned me because two men swore they saw me steal the sheep, I would have brought twenty to swear they did not see me.'" — The fallacy of this argument, however, is more strongly illustrated by the case supposed in our last, of the person who should argue the innocuousness of musquetry, because so many escaped harm who were at the memorable battle of Waterloo.

Touching the contagiousness of this disease, it cannot but have been remarked that however zealously opposed by Physicians whilst but poorly informed of the details of its progress, it has been almost uniformly allowed, by the same persons, after having had more ample opportunities of noticing it. In addition to the persons before mentioned, we find its contagiousness expressly affirmed by the most distinguished of those who have been eye witnesses of its ravages; among these we would mention Drs. Scott and Stuart, the principal members of the Medical Board at

Bombay—the Physicians of two divisions of the army at Bengal—the Medical Board of Calcutta—Dr. Kennedy, author of a valuable treatise on the cholera—the Bombay Report—the Medical Board of Russia—the Central Sanatary Commission in France, and the Superior Council—the Persian and Turkish governments—the four Austrian physicians who were sent to Russia to observe the disease—Dr. Walker as well as Drs. Barry and Russell—Drs. Makartienne, Martinengo, Meunier, Angelin, and Salinas, who have witnessed the cholera in different countries—Sir William Crichton and Dr. Loder, physicians to Nicholas—the late Russian General Diebitsch, and the Polish commander Skrznecki. Besides these, we may mention the Emperor Nicholas; the British Ambassador at the court of St. Petersburgh; and the French consuls Lesseps, Guys, Reynaud and Gamba.

The important subject of the appropriate *treatment* of the cholera is pursued in England, as we expected it would be, with unparalleled zeal and enterprise. The great question seems to be, whether there is yet any untried expedient which might possibly be useful in mitigating the violence of the disease;—the most judicious and practical men in the profession are assiduously occupied in endeavors to find out some more specific remedy than any that has been hitherto tried. The medical Journals teem with communications on the subject, and contain almost nothing on any other than this all-absorbing topic. Among the propositions already made, we would mention the following.

1. *Bark.*—It is supposed by many who have seen the cholera that it resembles, in many particulars, the tertian ague. Indeed Dr. Barry, at a public meeting held at Newcastle, stated that "there was more analogy between it (malignant cholera) and the worst forms of the tertian ague, or intermittent fever, than between it and the ordinary cholera of this country (England)." Hence it is proposed to use bark in doses of ʒiij. every second hour, combined perhaps with opium or laudanum. The bark in substance or tincture is recommended, in preference to the salts of quinine, as, besides a certain quantity of quinine and cinchonine, bark contains other principles of an astringent nature, which would aid in arresting the evacuations attendant on this disease.

2. *Galvanism.*—As the poison of cholera appears to act as a powerful sedative on the nervous system, and produce a recession of blood from the surface, numerous writers propose galvanism combined with a hot air bath, and local stimulants, as a probable mode of arresting its symptoms.

3. *Injection* into the blood of oxygenating salts. The nitrate and chlorate of potassa, in doses of from 10 to 30 grs. injected into the blood, have been supposed capable of oxygenating the blood, and so removing the most formidable symptom of cholera. This proposition has been made by Dr. O'Shaughnessy, of London, who had gone to Sunderland, at the last dates,

for the purpose of prosecuting his researches, and testing his theory by experiment. The result will be communicated to the reader in due time.

4. *Inhalation* of oxygenated gases.

5. *Transfusion.*—This remedy has been proposed in England; but it appears that it has been tried and found unavailing, at Berlin. The account of these experiments is so interesting that we shall give it entire next week.

6. *Cautery.*—At a late meeting of the Westminster Society, Dr. Barry remarked that the phlogosed state of the spinal marrow, noticed in examining the bodies of those who had died of cholera, led Dr. Lange, of Cronstadt, to try the use of the actual cautery to the spine, opposite the part where the inflamed or softened appearances presented themselves. This was done in fourteen cases, twelve of which recovered; and this too at the commencement of the epidemic, the very time at which experience had shown it was violent and intractable. In several of these cases the patients were so much satisfied of the relief afforded, that they begged for the repetition of the operation; but such were the prejudices of the people against the medical men—such their persuasion that the disease was produced by poison, and that this method was a kind of torture by burning, that it was found necessary to discontinue it.

Dr. Wilkinson has stated, in the last number of the London Journal, that he understands it to have been uniformly the case, that, in those countries where the cholera has prevailed, it has been preceded by an influenza, similar to that which recently prevailed in England. This fact will disappoint the expectations of those who had hoped that our recent epidemic might be a *substitute* for the great plague of the age. Dr. W. also remarks that he has been informed by highly respectable practitioners, that those who have previously suffered a severe attack of influenza are more apt to be affected by the cholera.

A Sunderland Physician has announced to the British Government that he has discovered a specific for cholera, and will make it known on receiving a suitable compensation! The reply of the government was such as must suggest itself to every reader. It is not possible that any one could see his fellow creatures dying around him, and thus withhold the means of preserving them till he could receive an adequate compensation from government. The proposition, therefore, must be a base attempt on the part of this Physician to impose upon the rulers and defraud the treasury of his country.

A Medical Exchange is held daily in Berlin for the purpose of mutual communications among the Physicians, respecting the cases of cholera, the effects of different or new modes of treatment, &c. &c.

The mortality of cholera on the continent of Europe has been very different in different places. According to an account given in the Russian State Gazette, the number cut off by the disease out of every 1000 inhabitants, during the first 48 days of its visit, has been—at Lemberg, 51; Mittau, 34; Riga, 31; Posen, 16½; Petersburgh, 12½; Konigsburgh, 11½; Elbing, 9½; Dantzic, 8½; Stettin, 5½; Berlin, 4.

At a stated meeting of the Cousellors of the Massachusetts Medical Society, held Feb. 1st, 1832, the following Preamble and Resolutions were adopted :—

Whereas, the disease called *Epidemic Spasmodic Cholera*, has prevailed in various parts of Europe, and may hereafter appear on this side of the Atlantic Ocean ; so that it is expedient that the Physicians of this country should be prepared to meet this disease : Therefore,

Resolved, 1st. That a Committee of *seven* be chosen by the Counsellors of this Society, whose duty it shall be to investigate the history of this disease, and especially to ascertain the best mode of treating, and carefully and without prejudice consider whether it be or be not a contagious disease.

2d. That the sum of thirty dollars be appropriated to defray any such expenses for the purchase of books, as may be thought necessary by the Committee.

3d. That this Committee be authorized to make public the result of their deliberations at the expense of the Society, at any period they may think most conducive to the public good.

The following gentlemen were chosen on this Committee, viz. Drs. James Jackson, John C. Warren, and George Hayward, of Boston, Alfred Perry, of Stockbridge, John Green, of Worcester, Rufus Wyman, of Charlestown, and Abel L. Peirson, of Salem.

Legalization of Anatomical Dissection.—The atrocious crimes recently committed in England, and which have produced there an excitement scarcely less than that occasioned by the cholera or the reform bill, have drawn the attention of the Government to the necessity of providing by law for the supply of proper subjects for dissection ; and a bill has been introduced into Parliament for this purpose by Mr. Warburton. It will hardly, however, accomplish the object for which it is or ought to be designed ; for it provides that no body shall be given for dissection without the consent of the person when alive, or of his nearest relative after death. Strange infatuation !

Spontaneous Combustion.—On the 23d of March, 1830, when at the island of Rótuma, Southern Pacific Ocean, I had requested a native to bring me some of the sweet scented male flowers of the Pauhuf (Pandanus odorotissimus) ; they were accordingly brought on board, enveloped in native cloth, and packed in baskets formed of the cocoa-nut frond ; and having been brought off to the ship during a heavy sea, were wetted by the spray. I laid them aside unopened in my cabin. Some hours after, looking at them I observed a steam arising from the basket ; and, on taking them out, found that a spontaneous combustion had taken place among those situated underneath, most of which had become completely blackened, and the heat which proceeded from them was very great. Had they been incautiously stowed in a ship's hold, the consequences might have been very serious.—*Mr. G. Bennett's MS. Journal*, 1830.

Luminosity of Coral Insects.—On the 20th of March, 1830, when coming off to the ship at Thor Bay, island of Rótuma, Southern Pacific Ocean, some hours after dark, a long reef of coral extended some distance from the beach, some part of which was dry at low water, and at other places the water was very shallow. The canoe in which I was going off grazed with some degree of violence on the coral nearly at the termination of the reef, when the surface of the water immediately became brilliantly phosphorescent, and remained so for a brief period. The water at other places I did not observe, this night, displaying any phosphorescent light. Can we infer from this that the coral zoophytes have luminous properties ?—*Ibid.*

Effects of Cold Weather.—According to the Natches papers, more deaths had occurred in that place, in one week, in consequence of the long continuance of cold weather, than in any one week since the yellow fever raged there in 1825.

The offer of 25,000 roubles, by the Russian government, for a cure of cholera, has already produced 125 essays, pointing out infallible remedies. Unluckily almost all of these have been discovered in the closet of the writers, and never tried in the sick chamber.—*Gazette Médicale.*

In consequence of a case of poisoning, at Paris, having, in the first instance, been declared to be cholera, the Prefect has addressed a circular letter to the Mayors of the provinces, directing them to be on their guard against similar mistake or imposition.—*Ibid.*

New Professorship.—At a late meeting of the Corporation of Harvard University, John Ware, M.D. of this city, was chosen Adjunct Professor of the Theory and Practice of Physic to that institution. In the wisdom of this choice but one voice will exist among the Faculty. Dr. W. will bring to the place a philosophical mind richly endowed, and a happy faculty of communicating to others the result of his investigations.

The prospect of a speedy reduction if not an entire abolition of postage on *periodicals*, will relieve distant readers of a part of the expense attending the subscription to this Journal.

Whole number of deaths in Boston for the week ending February 3, 24. Males, 8—Females, 14—Stillborn, 2.

Of dropsy on the brain, 2—scarlet fever, 3—dropsy, 1—consumption, 4—apoplexy, 2—abscess, 1—quinsy, 1—convulsions, 1—lethargy, 1—lung fever, 1—old age, 1—croup, 1—throat distemper, 1—influenza, 1—unknown, 3.

Whole number of deaths in Boston for the week ending February 10, 28. Males, 17—Females, 11.

Of palsy, 1—lung fever, 4—consumption, 4—bowel complaint, 1—throat distemper, 4—canker, 1—hooping cough, 2—scarlet fever, 2—liver complaint, 1—influenza, 1—drowned, 1—dropsy, 1—debility, 1—sudden, 1—dysentery, 2—unknown, 1.

MECKEL'S ANATOMY, 1st VOL.

CARTER & HENDEE have this day received, Manual of General, Descriptive, and Pathological Anatomy. By J. F. Meckel, Professor of Anatomy at Halle, &c. &c. Translated from the German into French, with Additions and Notes, by A. J. L. Jourdau, Member of the Royal Academy of Medicine at Paris, &c. &c., and G. Breschet, Adjunct Professor of Anatomy at the School of Medicine, &c. &c. Translated from the French, with Notes, by A. Sidney Doane, A.M., M.D. Feb. 15.

GREY'S SUPPLEMENT.

ANY one having Grey's Supplement to the Pharmacopæias, London edition of 1828, belonging to the subscribers, will confer a favor by returning it. JARVIS & PEIRSON.
Feb. 15.

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THE

BOSTON MEDICAL AND SURGICAL

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CHRONIC DISEASE OF THE STOMACH.

On Chronic Disease of the Stomach, with Two Cases and the Appearances on Dissection. By THOMAS SANDWITH, Esq. M.R.C.S.L., Beverley.

UNDER the term *Cancer* have been included many dissimilar diseases of the stomach, as Chronic Inflammation of the Pylorus, and Fungus Hæmatodes. Baillie makes no distinction between the carcinomatous and fungoid diseases of this part; indeed his description of Cancer of the Pylorus is a blending of the characters common to both. Afterwards, however, on the authority of Portal (Anat. Med. tom. 5, p. 205), he admits the existence of Fungus as a distinct species; observing at the same time he himself had never seen it in this situation. When we consider that fungus hæmatodes of the pylorus is unattended with pain, and that the pain of cancer is severe and lancinating, it seems wonderful that these diseases should have ever been confounded.

Dr. Pemberton manifests a similar confusion of ideas, and mentions a case to show that "a large scirrhus of the stomach near the pylorus with an open cancer on a part of it," existed for a length of time without a symptom during life to mark its nature. He also refers to a case of the same kind in De Haen (vol. iv. p. 162). The description of cancer in the stomach in the excellent Manual of Martinet, is in truth a description of fungus hæmatodes. On the subject indeed of cancer altogether there is a singular want of precision in the opinions of many of the French pathologists. Breschet and Ferrus confound with cancer, the fungus hæmatodes of Wardrop, the medullary sarcoma of Abernethy, and the encephaloid tumors of Laennec.

We are indebted to Andral for the first attempt to dissipate the obscurity that has hitherto prevailed. In his recent laborious work on the diseases of the abdomen, several cases of fungus hæmatodes are related, in the greater number of which pain, denoting disease of the stomach, was altogether absent, but the vomiting and emaciation and exsanguine appearance of the patient, together with the occasional detection of a hardness in the situation of the smaller extremity of the stomach, rendered it difficult not to perceive the nature of the disease. This author is of opinion, that no symptoms exist, which can in the living body point out the diagnosis between this disease and chronic inflammation of the stomach.

In the latter opinion he is borne out by the experience of Boisseau. Our own countryman, Dr. Seymour, has published a valuable communication on abdominal tumors in the Medico-Chir. Transactions, in which the distinction between cancer and fungus hæmatodes of the stomach is clearly established. The two following cases appear to confirm the views of these eminent pathologists.

1. *Case of Chronic Gastritis with Ulceration of the Pylorus.*

For a period of more than three years, Mr. S. æt. 25, was more or less an invalid. His disorder commenced in town, and was originally confined to the stomach ; the symptoms being, according to his description, those of chronic *Gastritis mucosa.* He said he suffered from a burning heat in the epigastrium, but no pain ; sour and acrid eructations, flatulence, loss of appetite, frequent nausea, and occasional vomiting of a watery fluid. The disease was considered to be dyspeptic, or, in vulgar language, "a bilious affection ;" and, agreeably with this notion, the blue-pill, tonic medicines, and a diet consisting of animal food, &c. were recommended ; a method of treatment now happily yielding to the influence of a better pathology.

When he put himself under my care, more than a year had elapsed, but he complained of the same distressing symptoms. Still there was no pain even on pressure. He received much benefit from milk diet, milk and lime water, a small bleeding or two, the external use of Jenner's ointment, and medicines to keep up a regular action of the bowels ; and returned to town in somewhat better health. His complaint, however, recurred in an aggravated form, and after three months he again visited the country.

His appearance was now sadly changed. There was great emaciation, and the complexion was pale and exsanguine. The food was regularly rejected some hours after eating, along with a considerable quantity of mucus ; and opening medicines in all forms, and of the most active description, failed to open the bowels. No remedies availed to arrest the progress of the disease ; emaciation and debility went on increasing ; the ankles became œdematous, and the abdomen so much enlarged, that but for the activity of the kidneys, his disease might have been mistaken for ascites. Now and then there were slight paroxysms of fever. The bowels continued obstinately costive, and were only slightly relieved by the daily use of injections. Meanwhile he made no complaint of pain, and his appetite was good. He ate heartily indeed, and knowing that whatever was the quality of his food, it would in due time be certainly rejected, he indulged in the most incongruous articles of diet. For some months before his death he was unable to leave his bed, and vomited frequently large quantities of a coffee-colored fluid.

Autopsy.—On opening the abdomen, the entire cavity seemed to be occupied by the stomach, which was dilated into an enormous sac, capable of holding more than a gallon. It was found to contain about three quarts of a coffee-colored fluid. Its parietes were thin, except near the pylorus, which was thickened, somewhat indurated, and from ulceration uneven. This portion of the stomach had a peculiar brown appearance, and the vessels were seen loaded with a coffee-colored matter, which oozed out, and could be squeezed from their ulcerated extremities.

The intestines were greatly contracted, and the calibre of the colon was so small, that the contents of its sacculi resembled small pellets of sheep's dung.

2. *Case of Fungus Hæmatodes of the Pylorus.*

The history of this case embraces a period of more than two years and a half. The complaint began in September, 1827, when, in consequence of continued grief and anxiety of mind, Mrs. H., æt. 62, was attacked with a diarrhœa, which assumed a chronic form. My assistance was not required until it had continued several weeks. The discharges were thin and watery, and unattended with pain or fever; and except the weakness attendant on such a disorder, and considerable emaciation, there was no other symptom of disease. Although peculiarly obstinate, it eventually yielded to remedies.

In the spring of the year ensuing (March, 1828), the diarrhœa returned with catarrhal symptoms. It was again relieved, and although she remained in a state of considerable emaciation, my patient had no serious disease until April, 1829. She then complained of disorder of the stomach, of which the symptoms were frequent vomiting of a watery fluid, black water as she called it (pyrosis), a sense of sinking and weakness of the stomach, general debility and emaciation; but no pain or fever. The ankles were slightly œdematous, but there was no diminution of the secretion of the kidneys. It is unnecessary to detail the method of treatment—suffice it to say, it had the desired effect of relieving the symptoms.

During the summer months her health was tolerable, so far so at least as not to require medical assistance; but in the autumn (Sept. 1829), the disorder of the stomach returned in a more aggravated form. She now regularly vomited some hours after eating; and the matter ejected, besides the ingesta, consisted of a material resembling liquid mud. The bowels were not very irregular, but the fæces were slate-colored. She still made no complaint of pain in the region of the stomach, but deep pressure occasioned some uneasiness; and there was an indistinct feeling of hardness a little above the navel, towards the right side, apparently in the situation of the pylorus; indeed there could be no doubt of the existence of an organic disease of the pyloric portion of the stomach. The emaciation was extreme, the skin loose and shriveled, of a dirty yellowish color; and the complexion sallow and transparent. The pulse was feeble, but slow and regular, tongue clean, and there was no fever. As no rational expectation of her recovery could now be entertained, the treatment was simply palliative; consisting for the most part of milk diet, and anti-emetic remedies.

About the middle of October, she was unable from weakness to leave her bed, and in this stage of the disease was seen by my friend, Dr. F. Leighton. It was agreed in consultation, that she should be kept in a recumbent posture; the diet to consist of milk alone, or with the addition of jelly prepared from the Lichen Islandicus, and the bowels to be opened by injections. A blister was applied to the epigastrium, and five drops of the nitric acid were ordered to be given every four hours. For about three weeks little or no advantage was gained, and her dissolution was daily expected. At the end of this time, however, the vomiting ceased almost entirely, and the stools became natural. She took the milk and jelly with appetite, and only complained of the privation of more substantial food. Her countenance became cheerful, but still the emaciation went on increasing. Injections of beef tea were now recommended. In this condition she continued the next three months, having about once a week or fortnight an attack of vomiting, or a return of diarrhœa preceded by a rigor and a paroxysm of fever. Once also one of the legs became œdematous, the swelling being preceded by pain and increased heat. Latterly she was able to leave her bed some hours every day, and indulged in a somewhat greater latitude in articles of diet; until at length a colliquative diarrhœa of not unnaturally colored, but very offensive, discharges came on, and a week afterwards she expired.

Autopsy.—The cadaver was emaciated to the utmost degree. A tumor about the size of an orange was seen through the integuments, above the navel, a little to the right side. On opening the abdomen the stomach was found greatly distended, and contained a considerable quantity of a coffee-colored fluid. The larger extremity was thin as paper, denuded in places of the mucous lining, the remainder of which was white and softened, and the whole so tender, that it gave way to the slightest handling. The pyloric portion was converted into a solid tumor, pale and hard. The submucous coat of the stomach, in this situation, was found on division to be thickened to the depth of from half an inch to an inch, and of great hardness; white bands running across. Pale reddish fungi covered the mucous surface, corresponding in appearance exactly to those depicted in Dr. Seymour's plate. When cut into, these fungi consisted of a soft whitish matter. The liver and other viscera appeared pale, but not otherwise diseased.

APOPLEXY OF THE SPINAL CORD.

Apoplexy of the Spinal Cord: from Reports of Medical Cases. By Dr. Bright.

Mr. Benjamin B., aged 48, was engaged during the greater part of his life in the merchant service at sea, performed many voyages to India and China, and in general enjoyed good health. In 1812 he received a violent chill at St. Helena, which brought on a rheumatism, with which he labored for many years. The muscles of the trunk both before and behind were occasionally affected; his bowels were habitually costive, and the digestive organs generally out of order. This was his last voyage. He engaged in commercial business at home, but, not proving successful, his health suffered through care and anxiety; he fell into a declining state, attended with nervousness, increased flow of urine, and some degree of emaciation. On the night of April 20, 1826, he sustained a slight paralytic attack, by which his mind and speech were a little disordered, and all the muscles on the left side were weakened. From the effects of this attack he never recovered; neither his articulation, however, nor his faculties, were sensibly impaired; and, from being at first hemiplegic, he gradually became paraplegic, in which state he died

April 16, 1827. During the two months preceding his death, the palsy having decidedly seized the trunk, the use of the catheter became necessary. There was also slouching about the nates, of the fetor from which his olfactory nerves were sufficiently acute to render him conscious. The act of death may be said to have occupied thirty-six hours; the powers of evacuation, speech, deglutition, the mental faculties, and the remaining muscular force, were successively extinguished. The respiratory function ceased the last. "As he sat up in the bed supported by pillows, the head and body vacillated from side to side; the breathing became laborious, and sometimes moaning and stertorous; the eyes were half closed, and had a wild and vacant expression; but as long as the power of communication continued, he signified that he was free from pain and distress."

Upon examining the head and spine, the following appearances were observed. The brain was sound, with the exception of a little serous fluid between the membranes, and some congestion in the veins of the pia mater. The disease had been apparently seated in the coverings of the spinal cord, which exhibited evident marks of inflammatory action, although the cord itself presented no visible derangement. Serous fluid, in considerable quantity, was found between its membranes, and the arteries of the pia mater were much injected. "Within the upper dorsal vertebræ, on the left side, rather more than an inch in length, in the direction of the spinal axis, and about half an inch in a transverse direction, was an apoplectic cell, containing the red and broken remains of a coagulum; and lower down in the spinal canal, the internal ligament was to some extent deeply marked by ecchymosis, as if in progress towards the formation of another similar effusion. The extravasation appeared to have been wholly external to the cord, which was in consequence compressed; but as far as could be perceived, it was neither disorganized nor inflamed. The coagulum seemed to be subjacent to the pia mater, and to be enclosed in a false or adventitious membrane."

Here, then, was clearly hemiplegia of the left side, arising from an apoplectic effusion on the same side of the spinal cord; although the right side of the brain, it should be observed, did certainly exhibit an undue degree of vascularity. This, however, agreed perfectly with the symptoms, and more especially with the fact that the complaint was purely paralytic, and eventually assumed the form of paraplegia, while the senses and the mental faculties were not obviously impaired.

It is justly observed by Dr. Stroud, that we may derive several useful and interesting conclusions from the history of the foregoing case. For example, it would appear that conditions purely nervous, and originating in long-continued mental disturbance, may, according to predisposition, induce an inflammatory or hemorrhagic state of the membranes investing the brain, or the spinal cord; and that this state, operating through the medium of the nerves, may exert an extensive influence both on the solids and on the fluids of the body. Under the exacerbations which repeatedly occurred in this case, the intensity of the secondary irritation progressively advanced, from itching and smarting to severe rheumatic pain, chiefly between the shoulders and on the affected side. The blood became buffy; the bile dark-colored and concentrated; the alimentary canal abounded with acidity. Without any apparent disorder of the stomach and bowels, the tongue used to become red, or foul, or parched; and all this obviously from the state of the nervous system. The excitement which proceeded from the left side of the spinal cord to the right side of the brain, furnishes an interesting illustration of an occurrence which usually takes place in the opposite order of succession, and affords additional evidence that the corresponding halves of the central mass of the nervous system decussate in the medulla oblongata.

CANCER OF THE BLADDER.

Cancer of the Bladder—Puzzling Case.

A man named Rossignot, aged 65 years, entered the hospital on the 13th Jan. 1831, saying he had been afflicted with rheumatism for a long time. His complexion was delicate, his limbs slender, and his features shrunk—in fact, he was greatly emaciated. He complained of a burning heat internally, and had much thirst, with constipation of the bowels, but little or no tenderness on pressure of the abdomen. He had severe pains in the lo͠ins, and indeed in both of the lower extremities. He had incontinence of urine, and his body and clothes smelt strongly of that excretion. This incontinence had existed for eighteen months, with some periods of retention of the same, the urine being very turbid, and sometimes mixed with blood. M. Biett conceived that there was some organic disease of the urinary organs. The pains in his loins increased rather than diminished, and on the night of the 16th of the same month, he was seized with hæmaturia; and the next day, in the midst of interrogations, he suddenly expired. The reporter, M. Berard, here asks what medical man, after observing the above symptoms, would hesitate to pronounce the disease Nephritis Calculosa? This opinion was that formed by M. Biett, and participated in by M. Berard; yet they were both mistaken.

On dissection, the kidneys were free from disease. The ureters were as large as the jejunum. The bladder filled a great part of the inferior pelvis, and was knotty on its surface, its cavity almost obliterated, and its parietes thickened enormously by a malignant fungoid disease. A cauliflower excrescence, of a cancerous character, projected from the bladder towards the inguinal ring; and another penetrated through the great ischiatic notch, compressing and blending with the great sciatic nerve. A third excrescence ascended from the fundus of the bladder towards the lumbar vertebræ, compressing the ureters, and obstructing the discharge of urine into the bladder. These post-mortem facts explained all the vital phenomena, though it would not have been easy to predicate the real nature of the malady during life.—*Revue Medicale.*

ON THE USE OF TOBACCO IN GOUT.

Observations on the Use of Tobacco as a Local Application in Gout, and other Cases of Constitutional Inflammation. By John Vetch, M.D., Physician to the Charter-house.

Under other circumstances it had been my intention to give to the public a series of detailed cases to establish the beneficial effects of tobacco as a local application, and one capable of alleviating in a great degree, and of sometimes altogether arresting, various forms of specific inflammation, more particularly gout and rheumatic inflammation attacking synovial membranes. Besides the power which this vegetable possesses in allaying the pain and abating the inflammation of gout, it assists the parts most materially in recovering their tone and strength.

The sensible effects of tobacco upon the skin and cuticle are readily perceived, by immersing, for a short time, the fingers in an infusion, or in a watery solution of the extract.

The infusion forms a valuable application in all cases of erysipelatous inflammation, and the only precaution to be attended to, is not to apply it to any part contiguous to the stomach, unless the production of nausea be at the same time desirable.

I was led to appreciate the valuable sedative and astringent power of tobacco in the first instance by the benefit I derived from it in cases of the last mentioned class, having many years ago instituted an extensive trial of all the known narcotics, with the expectation of deriving additional aid in the treatment of purulent ophthalmia.

The good and the powerful effects which I obtained from the tobacco, fully compensated for the inefficiency of all the other local applications I then tried ; its effects were notorious to all who saw it employed, and I now, as I ought to have done twenty years sooner, recommend its use to general notice, in cases of acute migratory inflammation, and especially when it attacks the joints, testicle, or sclerotic coat of the eye.

The infusion as directed by the London Pharmacopæia is sufficiently strong, and in many cases it is well to rub the part with eau de Cologne after the use of the tobacco.—*Med.-Chir. Trans. Vol. XVI.*

BLOODY PERSPIRATION.

A CURIOUS case of this kind is related in the French "Transactions Medicales" for November last.

Case. A young woman, aged twenty-one years, irregular in menstruation, and of indolent habits and obstinate temper, had been much irritated by some reflections made by her parents, on account of her abjuring the Protestant religion. She left her paternal roof, and after wandering about for some time, took up her residence in an hospital. She then was suffering violent attacks of hysteria, attended with general convulsions, and exquisite sensibility in the pubic and hypogastric regions. After paroxysms of hysteria, which sometimes lasted 24 or 36 hours, this female fell into a kind of exstacy, in which she lay with her eyes fixed, sensibility and motion suspended. Sometimes she muttered a prayer ; but the most remarkable phenomenon was an exudation of blood from the cheeks and the epigastrium, in the form of perspiration. The blood exuded in drops and tinged the linen. The cutaneous surface appeared injected in those parts whence the blood escaped, being red, and showing a network of arborescent vessels. This bloody perspiration took place every time that the hysteric paroxysm continued for a considerable time. This state continued for three months ; and ultimately gave way, it is said, to local bleeding about the head and sexual organs, together with strong revulsive measures.

ON THE LOSS OF BLOOD.

Of the Treatment of the various Effects of Loss of Blood.[*]

The treatment of the effects of loss of blood must be resolved into that which is general or constitutional, and that which is local; and it must vary according to the peculiar state or stage of these effects. Syncope, reaction, and sinking, each, require their appropriate treatment.

The constitutional treatment must be stimulant in syncope, sedative and soothing in the state of reaction, and restorative in that of sinking. The local treatment must vary with the organ chiefly affected, and with the mode in which it is affected.

When syncope assumes a dangerous form, the principal remedies are, an attention to the posture of the patient, stimulants, and chiefly brandy, and the transfusion of blood.

The effect of posture is not, even now, fully known. It would be easy to allow the patient to lie over the edge of the bed, the head low upon the floor, and the feet greatly raised. In this manner such pressure would be restored to the encephalon as would in many cases support life, until, other remedies being administered, the patient might be placed out of immediate danger.

I need not, in this place, notice the importance of a regulated mode of giving brandy and nourishment. I think it is frequently given in such quantities as actually to induce sickness, and its own rejection from the stomach, so as to frustrate the object of the physician completely. The effect should be carefully watched. The physician ought not, of course, in such a case, to leave the patient for a moment.

The next remedy is transfusion. Unfortunately it has too frequently happened that the proper period of adopting this measure has been allowed to pass by. Not only the vascular system is exhausted, but, after a time, the functions of the nervous system have begun to fail. It might be a question, therefore, whether galvanism might not be usefully conjoined with transfusion.

It is an important point to determine how large a quantity of blood the system will bear to receive under various circumstances of exhaustion. Too much may overwhelm. Too little may be inadequate to the accomplishment of the object in view.

It is also an important question whether the operation should be done at once, or at twice, or thrice, and with what intervals. As the system cannot bear a sudden reduction of the quantity of blood, so it may not be enabled to bear its too sudden restoration.

It is almost needless to add, that a due attention must be constantly paid to assist the arterialization of the blood, by the admission of fresh air; and to sustain the animal heat by proper clothing, and especially warm applications to the feet.

If there should be convulsions, delirium, or coma, it may be necessary to apply a sinapism to the nape of the neck; and in the two former cases, some mild sedative, as the tinctura hyoscyami, may be of advantage.

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[*] Extracted from the excellent work on this subject, by Dr. Marshall Hall.

In the case of excessive reaction, the remedies appear to be, first, extreme quiet of the body and of the mind; then, the mildest sedatives, especially the hyosciamus; thirdly, the mildest nutriments; and lastly, and above all, time.

The pain and throbbings in the head, the intolerance of noises, the general susceptibility to disturbance, the palpitations of the heart, alike demand the utmost quiet, to which everything soothing in the manner and treatment must be added. The tinctura hyosciami is, I think, the kindliest anodyne and sedative in these cases. The cause and other circumstances of the case, point out the necessity for mild nutriment, to which perhaps the minutest quantities of brandy may be added.

It may be necessary to subdue the throbbing action of the head, by local bloodletting even; and it is most remarkable how small a quantity of blood being taken, will relieve. An interesting example of this kind, is given at page 60. Two or three leeches are frequently quite sufficient.

But the most unequivocal remedy is a cold spirituous lotion applied all over the head, by means of a cap consisting of one fold of stocking.

In exhaustion with delirium, the tinctura hyoscyami should be conjoined, in full doses, with the other remedies. The morbid susceptibility, not only of the brain, but of the heart, is greatly assuaged by this remedy.

In cases of exhaustion with sinking, stimulants must be administered abundantly. Cataplasms of mustard may be applied to the nape of the neck, and to the feet. It is difficult to imagine what would be the effect of transfusion of blood; I have no doubt that galvanism would prolong life; and I should think the two remedies might be conjoined with advantage.

In all cases of exhaustion the functions of the bowels suffer. Constipation and flatulency are the usual consequences. These are best relieved by the warm water enema, which must, however, of course, be administered with due precaution, to prevent further exhaustion.

It is interesting to observe the blunted sensibilities in syncope and in sinking, and to compare them with the morbidly acute sensibilities of the state of reaction. Sinapisms to rouse, and the tinctura hyosciami to lull them, are, in their respective places, remedies of the greatest value.

Sinapisms may tend to save or prolong life, in the sinking state, on the principle of exciting inflammation. For it will be seen shortly, that during a state of inflammation, the system is far less susceptible of the effects of loss of blood generally, than in health.

After the due administration of bloodletting, there are three other remedies, the use and abuse of which still offer matter of interesting inquiry to the practical physician, both in their relation to the morbid effects of loss of blood, and to other diseases. These are, purgative medicines, brandy, and opium.

Aperients must be given, yet gradually given, in cases of debility or exhaustion. The bowels become disordered, and must be gently relieved; but the more active operation of an aperient would add to the exhaustion.

The powers must be recruited and sustained, and for this purpose brandy must be administered, yet cautiously. Too much stimulus would hurry the action of the heart. The proper criterion for the use of brandy is, on the contrary, that it should allay the morbidly increased action of this organ.

Opium, if properly given, allays the morbid sensibilities and actions of the system. But if it be administered in an undue dose, it is apt, I am persuaded, to lower the powers of life, by directly subduing the energies of the nervous system, or rather by inducing an impaired condition of the respiration. The undue action of opium, resembles, in fact, the case of subtracted nervous energy by the division of the eighth pair of nerves, with the superadded influence of impaired respiratory movements.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, FEBRUARY 22, 1832.

CEREALIAN ORIGIN OF CHOLERA.

It is a remarkable circumstance in the progress of this disease, that in the several countries which it has visited, the number of deaths among those in the more favored classes of society should have been so small. This circumstance is at the present moment noticed in England, and a similar observation was made at various places on the continent. As a confirmation of this fact, it will be recollected, how few individuals of any note have been mentioned as having died of cholera. Marshal Diebitsch has, indeed, been quoted to show that it attacked all ranks indiscriminately ; but besides that this individual, from the description we have of his person, must have been a bad subject for the attack, the very circumstance that he is named so frequently, strengthens our impression that he constitutes one of a small number of exceptions. It would appear then that beside the general cause which exists in the atmosphere or elsewhere, whenever the disease is present, something more is ordinarily necessary to bring this malady into operation : such as want of personal neatness, imperfect ventilation, improper diet, intemperance, and other causes tending to depress the general vigor of the system. These causes as we know exist to a considerable extent in all the cities which this pestilence has visited ; while the open country inhabited by a vigorous and hardy peasantry, has to a remarkable degree been exempted. If, then, in the course of human events, we are destined to be visited by this epidemic, we may hope that with us, as with them, it will be mostly limited to the towns, and that even in our great cities the comfort enjoyed by all classes of the community, the general prevalence of neatness and care of the person, the cleanliness of our streets and habitations, will, when aided by the experience we shall have derived from elsewhere, tend in no inconsiderable degree to control its ravages.

Among the speculations of the day in regard to the origin of cholera, one of the most curious, perhaps, is that of a late writer in the London Medical Gazette, Dr. Haygarth, who finds the proximate cause of cholera to be dyspepsia consequent on the use of unhealthy bread, in a state not suited to human digestion. He observes that the flour of wheat which has been ground at a too early period after gathering, will neither yield itself properly to the process of fermentation, nor afford due aliment to the system. He supposes grain of all kinds, after its growth is completed, to undergo a peculiar process which, after Dr. Prout, he terms *merorganization*, and which is requisite to prepare it for digestion. On this subject he expresses himself in the following terms.

> "If we regard the perfection of the panary fermentation as a test of the grain being sufficiently aged to be fit for food, or, in other words, that its *merorganization* is perfect, it would appear that this process requires several months for its performance; for I am informed that the new grain is not fit to be used by itself till about Christmas, until which time it is usual, in London, to mix a considerable proportion of old grain before sending it to the mill. If grain, then, is used in its too recent state, we suppose that, its merorganization being incomplete, too great a tax is laid on the merorganizing power of the stomach, and probably of the whole system; and this will, if other causes conspire, produce diseases of the stomach and its collatitious viscera; of which diseases cholera is one."

Some defect similar to that just described Dr. H. supposes to exist in the bread stuffs of the poor population who have been affected with cholera. Nor is he, as it would seem, without some convenient facts to aid him in the establishment of this part of his hypothesis. He finds, for instance, in Georgia, in most parts of European Russia, in the northern parts of Prussia, Poland, and even in Hamburgh, that the common food of the poor is rye: and that the bread or rather cakes from this article, are made from the grain, uncleaned, ground with the husk, imperfectly fermented, half baked, and in this state kept for use. The liability of rye to become vitiated, both from the diseases to which it is subject and from the admixture of other seeds, is another circumstance of importance in considering its probable effects. In Persia, from whence the disease is supposed to be traced, the usual food is rice, "the supply of which, owing to the improvidence of the people, is seldom sufficient to last till the following harvest, so that the inhabitants are compelled to use the new crops in the most recent state." It is also stated as matter of history that between the years 1770 and 1790, a disease ravaged various parts of Germany, particularly Silesia, Vrightland, and Lower Saxony, as well as parts of Sweden, Switzerland, and France, which by writers on the subject was attributed to the use of improper food, and particularly to that of rye. This disease, which is termed Raphania by Dr. Good, presented in its progress a striking analogy to the cholera in Russia, as Dr. H. makes evident by collating Richter's account of the former with Drs. Barry and Russell's description of the latter.

To render his arguments more conclusive, however, Dr. H. next notices a striking coincidence between the time of harvest in the different countries of Europe which have been visited by the cholera, and that of the appearance of the disease. The Russian cholera of 1829 made its appearance about the month of August, which is about the period of harvest in that country. That of 1830 first showed itself in June at Rescht, a town in Ghilan in Persia, in the lat. of 37°. At Baku, lat. 40°, it appeared early in July; in the latter part of the month at Teflis, lat. 43°. On the 19th July it appeared at Astrachan, on the 4th of August at Tgaritza, on the 6th at Saratof, and, still going farther north, arrived at Penza on the 17th August. About the end of August it appeared at Nisen, lat. 56°, then branched off east-and-by-south to Casan, and west-and-by-south to Moscow, in both of which places it made its appearance about the same time—namely, the middle of September.

As Dr. H. appears to have written this article, which is published in the Gazette for Nov. 16th, before the existence of the virulent cholera in Sunderland was generally known, the following passage, which really contains the strongest argument in favor of his views, deserves to be quoted.

"I have also been informed, by good authority, that the late harvest in this country has not been productive of grain of so good a quality as is commonly believed. Mildew had been unusually prevalent—a disease of corn in which it is observed that a number of grains in each ear are small, and its organization imperfectly devoloped. How far this may have contributed to the unusual prevalence of cholera after our late harvest, I leave the reader to judge."

Such is a brief abstract of Dr. Haygarth's paper, on the cerealian origin of cholera, which if it fails in establishing the premature use of grain as the cause of the present pestilence, certainly goes to show that bad living is a predisposing cause of common cholera, and has co-operated to render the present epidemic more severe and more fatal. There is, as we have said, some encouragement to be derived from this consideration: and should the disease come into our borders, as we can hardly dare hope to enjoy an entire immunity, we may at least anticipate that the favoring circumstances in our general condition will save us the experience of that fearful mortality which has marked its progress in the cities of Asia and of Europe.

TRANSFUSION IN CHOLERA.

We referred in our last to a trial that had been made at Berlin, of the transfusion of blood in cholera. The account of these experiments is contained in a letter from Professor Scoutetten, of Metz, which was read at a late meeting of the Academy of Sciences, in Paris, by M. Arago. It is as follows.

"I have the honor," says Professor S., "of addressing to you some observations, which I have made at Berlin, on the transfusion of blood: let the facts speak for themselves: be good enough to read them at the next meeting of the Institute; they may be useful to science and humanity, and perhaps prevent some unfortunate patient from being the victim of new experiments. The complete absence of blood in the arteries of the limbs appears to me a very remarkable fact, and the more astonishing that some lived in this state during five or six days, the capillary circulation being restored, with the heat of the limbs, without the pulse being perceptible. I have numerous facts of this kind, particularly the history of a Pole, who was able to walk about without the pulse having returned. He died suddenly, when it was least expected ; and this was the result in all those cases of which I speak.

Case I.—After having tried all the ordinary means in a case of cholera, it was thought right to have recourse to transfusion of blood. October 15th the operation was tried for the first time, by M. Dreffenbach, in the hospital of M. Boehr. The patient, Frederick Muller, of good constitution, aged 27, had been ill seven hours and a quarter, and he was in the following state. Eyes half shut, sunk in the sockets, ball turned upwards ; nostrils pinched ; cheeks hollow ; mouth partially open ; tongue cold, as well as the face ; respiration short and quick ; blueness of hands and feet ; complete absence of pulse ; skin of fingers shrivelled. The patient, however, retained perfect consciousness of what was passing around him. The right jugular vein was laid bare to the extent of an inch, and opened in a longitudinal direction, and the barrel of a quill introduced into it. Blood was furnished from the median vein of a robust young medical man. It was received into a small brass syringe previously warmed, and injected into the vein of the patient to the extent of an inch and a half. This was followed by almost complete insensibility ; after which the patient made two deep inspirations in succession ; the eyelids were rapidly opened, and again shut ; in five minutes there were convulsive movements of the head, which was drawn powerfully backwards ; next followed convulsions of the legs, arms, and trunk, alteration of the features, plaintive cries, and groans. These symptoms lasted less than a minute, then ceased all at once, and the patient was dead. It is said that no appearances different from usual were found on opening the body.

Case II.—The same day, transfusion was tried on a female, named Veber, aged 65. She was taken ill during the night ; the operation was had recourse to at ten o'clock next day. The following is an account of her condition. Eyes sunk, and surrounded by a brownish circle ; cheeks hollow ; bones of face prominent ; tongue hard, and feels cold ; complete absence of the pulse ; vomiting and purging rare ; consciousness entire. The only remedy used had been a vapor-bath.

M. Dreffenbach proceeded to the transfusion. The median vein of the left arm was opened to the extent of half an inch : very little blood flowed from it. A quill was inserted, and blood furnished by a student 23 years of age. The first injection, of an ounce of blood, produced no effect ; the same quantity was thrown in a second time. The patient then made two rather hurried inspirations ; the eyes were somewhat agitated. She had some mint tea, and drank it easily. I asked her if she suffered, and she answered, " No." The operator wishing to introduce more blood, opened the left jugular vein, into which he injected about a drachm of tepid water, to be assured that there was no obstacle. He then threw in, at two injections, two ounces and seven drachms of blood. The patient felt nothing. The day was passed tranquilly ; the pulse did not return. The usual symptoms went on, and she died six hours after the operation.

Case III.—A man, aged 61, seized with cholera, was admitted into the hospital on the 16th of October. All the symptoms were well marked. The attack had come on about midnight. At ten o'clock in the morning the operation of transfusion was decided on, but, before putting it in practice, it was resolved to ascertain whether the circulation did or did not go on; with which view M. Dreffenbach laid bare the brachial artery, to the extent of an inch, at the lower part of the arm. The vessel did not exhibit the slightest pulsation. An opening, five lines long, was then made in it, when it it was found not to contain one drop of blood: having within only a small red clot, not larger than a sewing-thread. The parietes of the artery were clean and white. The patient, meantime, was perfectly sensible, spoke of the operation, and answered with precision all the questions put to him. The deep-seated textures were as cold as the surface; the veins of the fore-arm were filled with black blood; the median was opened, and two ounces and a half of blood were injected at three times. The patient felt nothing; complained of no pain, except very slightly of the wound made to expose the artery. After the third injection the pulse returned in the axillary artery of the fore-arm; it beat sixty times in the minute, but this only lasted five minutes. Even then, not a drop of blood escaped by the wounded artery. Some appearance of contraction of the iris, it was thought, was to be perceived during the transfusion, and the expression was a little more animated. The patient died two hours after the operation, which seemed to have had no influence on the course of the disease.

REPORT OF THE COMMITTEE OF THE HOUSE OF REPRESENTATIVES OF THE UNITED STATES, ON THE MEMORIAL OF THE NEW YORK BOARD OF HEALTH.

The Memorial presented to the Congress of the United States, by the New York Board of Health, in which was suggested the expediency of some national act to protect the country from the ravages of the Cholera, was referred to the Committee on Foreign Affairs. We have been favored with the report of this Committee, in which they non-concur with the New York Board in the necessity of sending a commission to the scene of the malady, on the ground that the results of numerous like embassies are now before the public, and no further information could be expected from adding one to the number.—The Committee further report, that they agree with the memorialists in the ability of Congress, as part of their power to regulate commerce, to enforce measures of quarantine, and in the propriety of adopting some such means of protection as soon as it shall be deemed advisable: but they request to be discharged from the consideration of this part of the subject, as it is without their commission, and recommend that the same be referred to the committee on commerce.

Appended to the printed Report are numerous documents relating to this subject, most of which, or the substance of them, have been before presented to the reader.

Traveling Hospitals for Cholera.—Among the measures proposed in Paris for managing the cholera when it reaches that city, is the establishment of *ambulances* in each quarter. There will be a body of physicians, apothecaries, and nurses, ready to give the speediest succor. "It will be so ordered," says the proposer, "that the disease, the doctor, and the remedy, may enter together, or close on each other's heels;" "and that *death* also may probably be of the party"—adds one of the wicked wits.

Preservation of Blood.—Sugar refiners and others are often inconvenienced by the difficulty of obtaining blood at the time when it is required for use. M. Toursel has endeavored, in part, to remove this difficulty, by proposing a method of preserving this agent for some time without injury.

It consists in putting the blood into bottles or other vessels with very narrow mouths, and being careful to fill them up to the neck; a layer of oil, to the depth of at least half an inch, is then put upon it, to cut off communication with the atmosphere, and the whole is left to itself. M. Toursel states that he has in this manner preserved blood, with all its physical and chemical qualities, from the first of December, 1827, to January, 1829.

Presence of Manganese in the Blood.—(Prof. Wurzer, of Marburg.)—In some analyses of human blood, according to Engelhart's method by liquid tests, Professor W. was led to suspect that, besides the usual results, he had also obtained a small quantity of Manganese; not being, however, quite sure of the correctness of his analyses, he was induced to repeat them in the following manner:—The blood, which had been obtained by venesection, on the day before the experiment, was ignited in an open crucible, the incinerated mass oxidized by nitre, and then diluted with water; the residuum was dissolved in muriatic acid, and the iron precipitated from the solution by succinate of ammonia. As the precipitate contained also some phosphate of lime, it was again ignited, and then dissolved in muriatic acid; the phosphate of lime was separated from the solution by alcohol, the excess of the latter expelled by heat, and the iron precipitated by ammonia. By boiling the filtered liquor with carbonate of soda, the manganese was precipitated, and then dissolved in nitric acid, and again ignited. In two grammes of the coal was found 0.108 oz. of iron, and 0.034 protoxide of manganese.

Boylston Medical Society.—The following gentlemen have been elected officers of the Boylston Medical Society, for the ensuing year: George W. Otis, M.D. President; John C. Howard, M.D. Vice President; John Odin, Jr. Secretary; Mr. Henry Tuck, Treasurer. The annual prizes offered by the Society, have been awarded as follows: The first to J. Mason Warren; subject, "Comparative Anatomy of the Digestive Organs in the four Classes of Vertebral Animals." The second to Thomas K. Thomas; subject, "Iritis."

Merited Distinction.—Dr. Russell is to be created a Baronet, and Dr. Barry to receive the honor of Knighthood, with promotion.

Mortality of Boston for the year 1831.—The following are the diseases, precisely as reported to the Health Office, which have occasioned the deaths in this city the past year:

Apoplexy, 11; Asthma, 2; Abscess, 4; Accidental, 11; Brain Diseases, 4; Bowel Diseases, 13; Bleeding, 5; Burns, 13; Child-Bed Diseases, 14; Catarrh, 1; Consumption, 203; Cholera Infantum, 7; Cholera Morbus, 14; Convulsions, 29; Croup, 53; Canker, 14; Carbuncle, 1; Cancer, 5; Colic, 1; Colic, Bilious, 3; Dropsy, 28; Dropsy of the Brain, 51; Dropsy of the Chest, 4; Diseases unknown, 182; Disease of the Spine, 3; Dysentery, 28; Drinking cold water, 1; Diarrhœa, 1; Drowned, 15; Delirium Tremens, 6; Debility, 20; Erysipelas, 2; Fever, unknown, 11; Fever, Intermittent, 2; Fever, Nervous, 2; Fever, Lung, 81; Fever, Inflammatory, 2; Fever, Typhous, 21; Fever, Brain, 18; Fever, Scarlet, 58; Fever, Bilious, 4; Fever, Spotted, 1; Frozen, 1; Fracture, 1; Hooping Cough, 26; Heart Diseases, 8; Hip Complaint, 2; Inflammation, 3; Inflammation of the Bowels, 18; Inflammation of the Lungs, 16; Infantile Diseases, 56; Intemperance, 38; Insanity, 1; Influenza, 22; Jaundice, 1; Liver Complaint, 11; Measles, 2; Mortification, 9; Old Age, 67; Poison, 1; Pleurisy, 4; Palsy, 11; Quinsy, 5; Rheumatism, 4; Rupture of Blood-vessel, 2; Rupture, 1; Stillborn, 71; Scald, 3; Scrofula, 2; Sudden, 5; Skin, Disease of, 1; Smallpox, 4; Stomach, Disease of, 1; Suicide, 12; Spleen, 1; Spasms, 5; Suffocation, 2; Tumor, 5; Tic Douloureux, 1; Throat Distemper, 26; Teething, 10; Ulcer, 3; Wounds, 3; Worms, 3.—Total, 1,424.

The comparative mortality of the different months was as follows.

January, 99;—February, 84;—March, 109;—April, 97;—May, 82;—June, 89;—July, 98;—August, 125;—September, 126;—October, 136;—November, 142;—December, 237.

Whole number of deaths in Boston for the week ending February 10, 32. Males, 20—Females, 12—Stillborn, 1.

Of convulsions, 1—inflammation on the lungs, 2—child-bed, 1—old age, 3—consumption, 9—inflammation on the brain, 1—intemperance, 1—cholera infantum, 1—lung fever, 1—typhous fever, 1—infantile, 2—scarlet fever, 2—unknown, 1—suicide, 1—influenza, 2—erysipelas, 1—throat distemper, 1—fever, 1.

MECKEL'S ANATOMY, 1st VOL.

CARTER & HENDEE have this day received, Manual of General, Descriptive, and Pathological Anatomy. By J. F. Meckel, Professor of Anatomy at Halle, &c. &c. Translated from the German into French, with Additions and Notes, by A. J. L. Jourdau, Member of the Royal Academy of Medicine at Paris, &c. &c., and G. Breschet, Adjunct Professor of Anatomy at the School of Medicine, &c. &c. Translated from the French, with Notes, by A. Sidney Doane, A.M., M.D. Feb. 15.

GREY'S SUPPLEMENT.

Any one having Grey's Supplement to the Pharmacopæias, London edition of 1828, belonging to the subscribers, will confer a favor by returning it. JARVIS & PEIRSON.
Feb. 15.

MEDICAL BOOKS.

A practical Formulary of the Parisian Hospitals, exhibiting the prescriptions employed by the Physicians and Surgeons of those establishments; with notices of the various Hospitals, and copious remarks upon the Medical Doctrines of the Practitioners who preside in them. By F. S. Ratier, M.D. Doctor in Medicine of the Faculty of Paris, and Corresponding Member of the Royal Medical Society of Bordeaux. Translated from the French, with Notes and Illustrations, by R. D. McLellan, M.D., Licentiate of the Royal College of Surgeons, London.

Also,—Magendie's Formulary, for the preparation and employment of the New Medicines,—such as Strychnine, Emetine, etc.—Translated from the French, with an Appendix, containing the experience of the British Practitioners with many of the new Remedies. By Joseph Houlton, F.L.S., Member of the Royal College of Surgeons, London; Associate of the Medico-Botanical Society.

The American Editions of the above valuable works, in any quantity, as also the most popular of the medicines therein mentioned, are for sale at the store of the subscribers, who have for sale an extensive assortment of Surgical Instruments, Chemical Substances and Apparatus, at wholesale and retail, on satisfactory terms. SAM'L N. BREWER & BROTHERS,
Feb. 1. 6t. No's. 90 & 92 Washington Street, Boston.

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THE

BOSTON MEDICAL AND SURGICAL

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VOL. VI.] WEDNESDAY, FEBRUARY 29, 1832. [NO. 3.

THE DOCTRINE OF INTRO-ANIMATE PATHOLOGY:

Being a Thesis proposed by John C. Nyander, *a Native of Calmar, under the Presidency of Doctor Charles Linnæus, at Upsala, 23d June, in the year* 1757.

Of all diseases, there are hardly any of which the origin has appeared to Physicians to be more abstruse, than those called contagious : inasmuch as a body, hitherto in the most perfect state of health and in the strict observance of every rule of diet, is found equally liable to be contaminated, as that of one giving himself up to every sort of excess, provided only, there shall be too near an approach to a person laboring under disease.

And our wonder is the greater on observing that there are many other contagious diseases, which being indigenous amongst us, arise as it were spontaneously almost every year, such, for instance, as the itch, hydrophobia, hooping cough, and dysentery ; whilst there are others again which never arise, except from holding intercourse with diseased persons having these complaints from a foreign derivation : such for instance are the plague, measles, smallpox and syphilis. And here it will suffice to quote a few of the conjectures which have been formed by some of the most learned Physicians in respect to the origin of these, since various opinions have been cherished by various writers.

They have been ascribed to putridity, by Fracastorius, Rhodius, and Mindererus ; to a sulphureous self-increasing putridity by Hoffman ; to a sort of fermenting miasma by Junkerus ; to somewhat corrosive by Alpinus ; to an acrid volatile salt by Sylvius ; to an arsenical virus by Sorbait ; to imagination and terror by Rivinus ; whilst others again have imputed them to virulent exhalations from the earth ; others to celestial influences and conjunctions of the planets ; some also to exhalations from heaps of dead bodies corrupting and vitiating the atmosphere ; and others, as Kircher, &c., to a verminous putridity. But, of all the above quoted causes, which are universally brought forward by authors, that appears to us to be the most probable, which asserts "that contagion arises from living animalcules," as Rivinus and others, who ascribe the itching of Exanthemata to the existence of acari. In our attempt therefore to proceed by this path, we shall expatiate no further than we may feel ourselves justified by the guidance of our experience, and whenever we shall arrive at that point which is only probable, but which has not hitherto been actually made the subject of ocular demonstration, we shall merely touch upon it with all brevity, and state it as an hypothesis.

Contagious diseases, then, for the most part, all coincide in this peculiarity, that they are attended with exanthematous eruptions, either externally or internally, insomuch that even hydrophobia is said to produce certain pustules underneath the tongue ; so that in all contagious maladies there exists a certain exanthematous matter, the eruption of which usually mitigates the febrile symptoms ; that the presence of this matter excites bodily uneasiness, if not feverish actions, and that, even in its mildest form, the disease is exacerbated at some certain hour of the day, or towards evening. That the power of the disease is increased by *sweet* articles, but diminished by *bitters*, and that the irritation is excited by *fat* articles of diet. That it is somewhat repelled by cold, but like everything animate, is cherished by warmth, although it appears to be expelled by great heat : thus, from the application of heat, the itch and every exanthema is augmented, and from increase of heat and fever driven outwards to the warm surface of the body. That they are destroyed by *anthelmintic* remedies, and therefore *sulphureous* remedies cure the itch : and thus *mercurial* medicines, (as they are destructive to nearly all insects), cure both the itch and syphilis, and prove preservative both from the plague and smallpox. And that as tobacco kills all minute insects, fumigation with it prevents contagion. That both analogy and the sense of itching in the pustules of contagious diseases, seem to warrant the same inference. That both in itch and dysentery, the existence of minute insects has been the subject of ocular demonstration. That Langius had observed them in measles ; and Kircher in the plague ; Hauptmann in syphilis (animalcules resembling slugs) ; Zeigler in Petechiæ ; Lusitanus and Porcellus in smallpox, and that the last mentioned had observed also worms in cases of serpigo and other cutaneous diseases.

Both from analogy, therefore, as well as from all the experience hitherto acquired, we may very easily believe that very minute insects of that kind, such for instance as *acari* of various species, may be the causes of several contagious diseases. Nor is their size or structure at all repugnant to such an idea—since there are animalcules so minute that the human eye unassisted by the microscope cannot even perceive them. The lynx-sighted Lewenhoek observed thousands of insects (or animalcules more properly speaking) which added together scarcely equaled in size the hundredth part of a grain of sand, and even in those fluids which to the naked eye seem altogether pure and diaphanous. While the accurate and ingenious Reaumur has stated it to be his opinion, that that obscure vapor which somewhat darkens the atmosphere in summer, is nothing else than myriads of insects, so minute as entirely to elude human vision. And the same naturalist has demonstrated, that these do not exist separately only, but also congregated in societies similar to those of bees and ants, and that these also observe amongst each a certain regular order.

From any evidence of our senses, therefore, we must draw no argument as to the impossibility of the thing : for the divine PROVIDENCE of the all-wise Creator of the universe is equally manifested in the most minute, as well as in the greatest, of his arrangements. Whilst we inspect a living acarus, we feel assured that, minute as it is, it is provided with muscles, nerves, veins, arteries, and viscera: and that all these, however small, are yet adapted to contain the most subtile fluids, calculated to circulate through them: all this too we are perfectly warranted in believing. Whence these animalcules shall have proceeded we may well wonder, but we are scarcely warranted in that wondering, if at the same time we but think that these being of such very minute proportions, that they hardly exceed in size the atoms of the atmosphere, can yet fly through the air and seek out the most minute chinks, exactly in the same way as mucor arises constantly from its seeds, sowing themselves wherever any putrid matter shall exist in a state fitted for their reception.

SCABIES.

Of all contagious ailments, this probably is the most common, and the most obvious to our senses. It is a well ascertained fact that this cutaneous malady is excited by the *Acarus Syro*, which, although so minute as scarcely to be seen by the naked eye, can be generally detected lurking under the skin, where there is a certain bluish spot, and that it can be taken out upon the point of a needle and placed upon the nail. If then we place it upon the skin and breathe upon it gently, so as to excite it by the warmth of our breath, it can be easily distinguished creeping away and displaying its minute structure, till it shall have found out a wrinkle in the skin, when it immediately begins to make a burrow for itself exactly in the manner of a mole, by digging down with its claws. The Acarus (No. 1195 in Linn. Fauna Suec), although a little more highly colored, resembles it very much. If a morsel of cheese, or a little flour, be placed aside for some time, so as to remain undisturbed, we frequently observe myriads of these insects or mites feeding on either of these substances; hence too, it happens, that when nurses, instead of using the powder of lycoperdon, or flowers of zinc, scatter wheat-flour on the groins and armpits of infants suffering from *Intertrigo*, these parts become frequently attacked with the itch, which will return there again and again after being cured, unless that practice be left off: and these infants too will communicate the disease to others. We therefore conclude that the acari produced in wheaten or oat flour, and those of the itch pustules, constitute one and the same species.

Dr. Zweib has observed these acari depositing their eggs, multiplying themselves in a very short period of time, and has seen them living for several days, outside the body. But Lewenhoek has long taught and delineated them as being viviparous.

We find therefore that the itch is propagated constantly, either by means of actual contact, or by articles of dress, or from associating with infected persons. The itch-insect seems to be impatient of cold, but agrees well with warmth, wherefore the itch is repelled by cold and exasperated by heat, so that we have found that the same cause which shall have excited the itching externally, hath produced fever internally, which has not ceased before full eruption or efflorescence. Wherefore reasoning on this phenomenon, and comparing it with the causes of exacerbations in fevers, (which also excite of themselves a very violent itching,) it is natural to entertain the opinion of these also being contagious. For a like effect seems to betoken a similar cause, and nature, which is ever self-consistent, is scarcely ever wont to make violent starts—although, from the obscure nature of the subject, we do not feel ourselves warranted in further assumptions.

In the itch of animals (called mange) acari are detected with greater difficulty, not however that they are altogether exculpated from them, since there is another species (the acarus exulcerans) which we can easily discover by means of a magnifying lens, which are distinguished by four hind legs and twice as long as their body : and thus the cause too of this malady is placed beyond all doubt. And as we are in the habit of preserving specimens of insects in our museums by the presence of the ambrosiacal drugs, such as musk, civet, sweet flag, camphor, the essential oil of birch-bark, &c. ; so we also find the exhibition of these remedies proves quite successful in driving outwards the eruption of exanthemata, when they have been suddenly repelled. When musk has been suspended in a necklace round the throats of infants, it has been found effectual in preserving them from smallpox when raging epidemically, as has been proved experimentally by our president Linnæus, and as is customary with the inhabitants of Norway, and as appears to be the case from some instances quoted in the lately published acta petropolitana.

In respect to the *itch of old age*, the same reasoning applies, and experience has also demonstrated the existence of acari therein. When it has once attacked the body, should it go off spontaneously, it very seldom returns. Some years since we observed two goats infected with the mange chiefly in the mouth and face ; one of them died of it, but the other, to whom musk was given, became perfectly sound, within the short space of three days.

THE DYSENTERY.

The dysentery is an epidemical itch, attacking the internal surface of the intestines, as appears from the dissections of the bodies of those who die from dysentery, and that it is propagated by means of places of necessity, and through common sewers, there is not any experienced physician who now entertains a doubt. Bartholine narrates the case of a certain Danish physician at Heilsinburg in the last (17th) century, who having been frequently attacked by dysentery, examined his excretions, and found them swarming with living insects, in a state of motion, and so minute that he could scarcely observe them. And in this place we must not omit to mention a case in the highest degree illustrative of the above quoted fact.

About four years ago, Dr. Rolander, being then a pupil of and boarded in the family of our president Linnæus, having been attacked with dysentery, was cured in the usual manner with preparations of rhubarb and paregorical remedies. Eight days thereafter he relapsed into the same disease, and was again cured by the same remedies. But a period of eight days having again past, he was a third time attacked with dysentery. A rigorous inquiry was now instituted to detect the cause of this, but all in vain, seeing that the patient enjoyed the same table and followed the same course of life with all the other members of the family, who were enjoying perfect health. Therefore our learned President advised the patient (who was much addicted to the study of entomology) to examine carefully his dejections, by which it might the more clearly appear, whether the above quoted observation of Bartholine really held good or not. On Rolander's doing so, he reported that he had observed myriads of animalcules, and which upon being accurately described proved to be exactly similar to those of flour. And some one conjectured that the cause of these was to be found in a certain nocturnal beverage, whilst others again conceived that this was not adequate to produce such an effect.

Rolander had not been accustomed to take any beverage during his meals ; during the night, therefore, being incommoded with thirst, he was in the habit of swallowing a very diluted beverage from a cup (a bicker) made of juniper wood ; on inspecting this cup, he found a small whitish line scarcely to be perceived by the naked eye, running between the crevices of the wooden staves of the cup, and having applied a magnifying glass, he found that all this white line consisted wholly of innumerable acari, of the self same species with those which he had remarked in his excretions. On the beverage being poured into a cup they did not stir, but at midnight having quitted their retreats, they emerged to the surface and floated and remained there till the hour of ten in the morning, feeding themselves ; when they dived and re-entered the chinks they had quitted. This fact he discovered after repeated observations. Having taken out these acari and placed them upon a moistened watch-glass, they were found to be but little irritated by the adfusion of various liquors, and that even after the application of oil itself they remained unhurt : but they were particularly annoyed by the application of spirits of wine (alcohol) and most especially by the spirituous tincture of rhubarb. A fact especially worthy of notice, seeing that rhubarb is actually a specific for dysentery, and that the lapathum acutum or sharp pointed dock, which is a plant very nearly related to it, is a common remedy for the itch, and is demonstrative both of the affinity and analogy of the two diseases, and their remedies. These acari adhered firmly to the wooden cup after three ablutions in hot water. Rolander also searched for them in other situations, and found them most frequently in vessels containing acid beverages and also beneath the bungs of casks. That dysentery, which infects the territories of Sweden almost every year, during the harvest time, as well as that which is common in camps, most probably derives its origin from the self same acari lurking in acidulous beverages, and which, by means of the necessaries, are propagated, and thus give rise to what is called contagion. In the Old Testament therefore it was enjoined that every soldier should immediately bury in the ground his own excretions. Would it not therefore be advantageous both to the Swedes, and all soldiers who are encamped, to use in preference earthenware and metallic drinking vessels, because these insects can only with difficulty adhere to such vessels. It is hurtful, as the common proverb goes, to drink during the night when languid from an empty stomach, unless the superior portion of the beverage be first poured off and rejected. The vulgar are ignorant of the real cause for this custom, but the above recited observation, proves that these acari are then in motion, and hence no doubt has arisen this fashion. A pain in the bowels is excited by a draught of vapid liquor, which again is generally suppressed by taking a small quantity of proof spirit, which in its power of injuring these acari approaches nearest in efficacy to rhubarb.

THE HOOPING COUGH.

This disease, not so much known to our progenitors as at present, now generally attacks our infants. The epidemy therefore of this malady must of necessity be such a miasma that it can easily evaporate from the sick and be propagated and multiplied, but we apprehend that all these predicates can only be attributed to something endued with life. The domestic remedy which the Vestrogoths or Norwegians commonly employ against this malady consists of *the infusion of the ledum palustre*, (a plant which is also employed to cure swine and cattle of lice,) and which being remarkable as a most powerful narcotic and strong scented poison to insects, seems to denote that the causes of this malady also are to be found in animalcules. And to this is to be conjoined the very remarkable fact noticed by Dr. Wahlbone of Calmar, who prescribed for an infant, laboring under this disease, some musk julep, made according to the London Pharmacopœia Formula, from which remedy after being taken for two days, the patient's body became flushed with an efflorescence or slight itching, and the hooping cough disappeared : a short period having elapsed, the complaint returned, and the itching having receded internally, he again administered the same remedy, which again produced its first effect, and the infant was perfectly cured. May not therefore the hooping cough be derived from a certain species of acari, which more particularly affect the organs of respiration, and thence derive their nourishment, since the disease is both cured and relieved by the same sort of remedies which destroy acari.

Why this same disease, like the smallpox and the measles, should attack us only once during our lives, and but very rarely returns, we are just as ignorant as why the itch of old age should not make more frequent attacks.

THE SMALLPOX.

Between the smallpox and the beforementioned diseases there is a great correspondence. It originates from some unintelligible cause either in Europe or America, and is never transferred to us (in Sweden) except by means of contagion. But it is very likely that it is excited in the same manner, more especially as children who have been fed too much on a *sweet* diet, and whose fluids are unusually bland, are more infected with this disease, in like manner as they are with the itch.

Some years ago, when smallpox was very fatal at Upsala, and was carrying off nearly all the infantine population in the neighborhood, our president Linnæus suspended necklaces containing musk around the necks of his own children, as has long been the custom amongst the Norwegians ; by which means he succeeded in preserving them uninfected from this fatal scourge. It has latterly become the custom to foment the thighs of patients laboring under the smallpox, in the common way, with a fomentation of milk sweetened with sugar ; whereby, the insects appear to be attracted as it were to those parts of the body; for the thighs seem to become quite beset by pustules, but all the rest of the body is much less affected with the eruptions.

It is a custom with the Chinese, in preparing their children to receive the smallpox, to administer previously some mercurial and sulphureous remedies, and a little saffron also (with which last drug the Chinese sailors dye their shirts to prevent their being absolutely devoured with vermin) is applied to the eyes, to guard these delicate organs from the smallpox virus; they also add a quantity of musk to the matter used in their inoculation, which is there performed by stuffing some dossils of lint contaminated with the pus up the nostrils. By which addition of musk they think to expel the acari from the sanies produced in the frontal sinuses—they also excite some artificial issue, which is not allowed to be healed up, till the whole disease has quitted the body, being of opinion that the exanthematous matter is chiefly accumulated there, from somewhat animate, which, owing to the urgency of the internal injury, is driven outwards and thus seeks vent, which, being thus obtained, procures relief to the patient.

THE MEASLES.

This is a disease which, from its nature and foreign origin, seems nearly allied to the smallpox—the seeds of columbine (*aquilegia*), (which are poisonous, and nearly resemble those of *staphisagria* or stavesacre, commonly exhibited as a remedy against the itch in children, and which, in the hands of ignorant old women, have frequently proved fatal to infants, when given in too great doses)—these seeds of *aquilegia*, in Sweden, when powdered on some musk, are very commonly given, as a remedy, to patients suffering from measles and smallpox, that the eruptions may, by these means, be driven outwards to the surface of the body, and the internal viscera relieved from the violent action of these diseases. In the obstinate cough and oppression of the breast which affect persons attacked with measles, when scarcely anything is found to avail, flowers of sulphur, in small and repeated doses, conjoined with febrifuges, are found to be quite a specific. In a word, all remedies which are found to be efficacious, either as curatives or prophylactics, to persons attacked with either smallpox or measles, also possess great efficacy in destroying insects, either because they cannot endure the smell of these medicines, or because they are thereby driven outwards to the surface of the body, and expelled.

THE PLAGUE.

It seems to be an assured fact, that the plague never arises in the seaport towns of Sweden, unless from a contagion imported from foreign countries. That it is multiplied and propagated—that it also rages and abounds chiefly in low and putrid regions in the warmer countries. That it gathers strength and becomes more inveterate when assisted by a certain corrupt state of the atmosphere, being checked towards winter, but breaking out afresh on the coming on of spring and summer. That according to the testimony of Dr. Timoli, it, the plague, is not found to enter houses that have been thoroughly cleansed and purified. That its advent is generally foretold and preceded by several, and for the most part contagious, diseases. That it is always attended by exanthematous eruptions. That its miasma can be equally swallowed mixed with the saliva, or introduced through the pores of the skin. That the powers of this miasma, according to the experiments of Dr. Sylvius, are weakened by acids diffused through the atmosphere, and destroyed by acids themselves. That this pestilence, when lately for the first time it broke out at Moscow, was cured, according to the testimony of *Schreiber*, by mercurial medicines, the most noted remedies against the itch arising from acari. That musk and camphor also, according to the same author, were found to avail greatly in the cure of the plague. All which observations, which are most true, appear to indicate that insects are in reality the cause of pestilence.

THE SYPHILIS.

That syphilitical diseases, we are of opinion, more especially as they never arise without the contact of fluids, (through sexual intercourse, &c. &c.) seem conjoined by an intimate analogy with the plague, and that they take their origin also from animalcules, but which insects are aquatic. Hence also, it seems to appear, that fevers of that kind are excited by acari, seeing that they are expelled by medicines appropriated to their destruction. Wherefore, that the itch and the dysentery may frequently arise amongst ourselves (Swedes), follows from the above recited facts, since it appears that the cause of the former is common in the flour of grain, while that of the latter is to be found in our drinking cups. But, on the contrary, that the insects producing the plague, smallpox, &c. are exotic, and it appears probable cannot exist amongst us unless imprisoned in an infected body, or some other, to them, properly adapted mode. Perhaps the cause of this circumstance is to be attributed to our more severe climate, or to the more tender nature of these acari ; for if we may be permitted to reason from more obvious to more subtle facts—while some insects are indigenous amongst us, some there are only to be found in summer, while we observe others again, which are only found to live within our houses, where the artificial warmth of a fire preserves them alive. These last, we are of opinion, have proceeded from countries lying more towards the south, but of all these the tenderness has not been equal, for we also observe insects which have come hither from the warmest regions of India, and which have adapted themselves to our climate and country. The same thing has happened, likewise, to those animals, of whom a much greater number must have been found formerly in some particular places ; whence indeed they must have diffused themselves far and wide, and produced their own melancholy effects. Of these, some, it may possibly be conceived, have become domesticated amongst us, and thence we may be able to explain why some diseases, formerly unknown, have arisen in certain localities and become disseminated afterwards. Hence, too, we are naturally led into that track, whereby we can discern the reason why certain diseases are more prevalent at some particular seasons of the year. For besides, that most contagious diseases rage chiefly during the summer quarter, being that when all insects most abound, the greatest difficulty, and arising from the artificial œconomy of these animalcules, which, by the wonderful analogy of exanthematous diseases, we acknowledge, may possibly be solved—namely, in what manner does a dead body always throw out its own peculiar eruptions, according to the variety of circumstances, from the internal parts towards the surface, in so determined a manner. What, I say, is more probable, than that organized animals effect this ? What more adapted for this act, than the most minute insects, whose wonderful manner of existence excites the admiration of the best naturalists ? What is there to hinder these most minute insects from inhabiting our bodies, seeing that we cannot be said to be altogether free from others of greater size ? For many entire insects, of various kinds, both in a state of metamorphosis and even after having suffered their changes, have been found alive in the human stomach, &c. &c.

VALUE OF ACCURATE PROGNOSIS.

On the value of accurate Prognosis, in a letter to Sir Henry Halford, Bart. By George E. Male, M.D., one of the Physicians to the Birmingham Hospital.

Sir,—Having read with much interest, the papers re-published by you, in the small volume with which you have lately favored the profession, my conscience reproves me for not having fulfilled my intention of communicating to you a case of ischuria renalis, which I did intend to submit to your perusal at the time it occurred. I considered this communication due to you, as it was to your observations on that disease, contained in an early volume of the Medico-Chirurgical Transactions, that I was enabled to deliver a prognosis at the very commencement, of the only instance of it I at that time had ever seen. I will give the case, without comment, as I find it in my note book.

—— Dyer, a publican, aged 65, neither fat nor bulky in stature, temperate, and generally healthy, was seized on Monday, 7th of May, 1821, with pain in his bowels, for which he took tincture of rhubarb, castor oil, and salt, at different times, which purged him considerably ; he passed no urine, nor did he feel any inclination to do so. The next day he was free from complaint, and rode on horseback three or four miles, without pain or inconvenience. I was called to him on Friday, the 11th, on account of the cessation of the secretion of urine, and found him apparently in perfect health, without pain, or great uneasiness of any kind, nor had he experienced any since Monday. There was no swelling of the legs nor abdomen, nor any fulness of the region of the bladder ; but he experienced a dull sense of weight about the kidneys, and almost a total suppression of urine. The quantity passed since Monday (four days) did not exceed half a wineglassful, but it was clear, and of natural appearance, unmixed with gravel. He had experienced former attacks of this kind, and vomiting relieved him ; he had formerly passed gravel. His bowels being costive, I ordered him one grain of the extract of elaterium, having often observed its good effects in exciting the action of the kidneys ; the warm bath was proposed, but he objected to it, as it had done him no good on former occasions ; therefore fomentation of the loins was substituted, and the following mixture or dose.

R. Aquæ fontanæ. Aquæ menth. piperit. āā ʒiij. Potassæ supertartratis, ʒi. Spt. ætheris nitrici, ʒss. M. capiat coch. duo larg. tertia quâque hora.

12th. The pill of elaterium had but little effect on the bowels, but excited some vomiting. No urine passed.

Recollecting a case recorded in the Medico-Chirurgical Transactions, by Sir Henry Halford, I apprised the patient's friends of his danger, and foretold that he would, in a few days, become senseless, and die as if by apoplexy. Seeing no appearance of any great deviation from health, my prognosis was received by them with silent doubt. The elaterium was repeated in the same dose, and I took care to ascertain that it was genuine. A catheter was introduced into the bladder, but very little urine followed. Repeat the mixture. R. Tinct. digitalis, ʒss. Tinct. Lyttæ, ʒi. M. sumat guttas LX. tertiâ quâque horâ ex decoct avenac cyatho.

Having no thirst, he is unwilling to drink. Pulse 86, soft but full ; some stupor and drowsiness is experienced. Mitt. sanguis ad ʒxiv. et appl. emplast. lyttæ largum lumbis.

13th. The bladder again examined with the catheter ; no urine followed, nor has more than half an ounce been passed. Still no pain. Blister rose well, and discharged much. The elaterium produced two or three stools ; much nausea, and some vomiting. Continue the medicines. Stupor increases. Repet. venesection ad ʒxii.

14th. No urine. Apoplectic symptoms come on ; his eyes staring and fixed ; totally unconscious, and unable to take medicines ; apparently no pain, but he is bathed in profuse perspiration, which has a very strong, and somewhat urinous smell. Pulse 76, full and soft. He continued in this state till the next morning, when he died.

Dissection. Thirty hours after death, the body was opened by Mr. Russell, who attended the patient with me. The *right* kidney was much enlarged and inflamed. The tunica adiposa was more than usually loaded with fat, of a dark red color, and exhibited marks of considerable inflammation. The upper part of the ureter was blocked up with loose sabulous matter, a quantity of which was also found in the pelvis of the kidney, and in the infundibula; but not of a size much larger than the head of a large pin. The upper part of the ureter and the pelvis contained a small quantity of urine. The *left* kidney was almost entirely absorbed, and had evidently long since ceased to exercise its functions.

In the only infundibulum which remained, was impacted a small calculus, about the size of a pea. The ureter was pervious. The bladder was healthy, and contained a small quantity of urine. The urethra was in its natural state. The liver and other abdominal viscera were sound. We were not permitted to examine the head.

As I believe there are not many cases recorded, similar to those already communicated by you to the College of Physicians, I trust that this addition to them will not be unacceptable to the public.

I have the honor to be, Sir, your obedient, humble servant,

that when

Birmingham, S GEO. EDW. MALE.

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EARLY SETTLEMENT OF THE TERRITORIES OF THE NORTH.

Among the numerous instances of a judicious direction of national wealth and enterprise to the advancement of science, within a few years, not the least interesting to ourselves as Americans is the expedition fitted out by the Danish government to explore the east coast of Greenland. It may not be generally known to our readers, that there remain in the annals of Iceland particular and detailed accounts of a colony furnished by that island to the opposite coast of Greenland as early as the tenth century; of the formation of several settlements on both sides of Cape Farewell, whose names are given; of the conversion of the colony to Christianity; of the establishment of several monasteries; of the bishops successively sent thither; of the trade between that country and Norway; of the subsequent decline of the colony, and of a terrible pestilence called *the black death*, in the year 1348, which hastened its ruin. Such is an abstract of the history of Old Greenland, the location of which may be found variously laid down on the maps, or altogether omitted, according to the fancy or the credulity of the authors. New Greenland, established by the Danes, is of far more recent origin, and dates only from the early part of the last century. It is also confined entirely to the western part of the country, it having been found wholly impracticable to approach the eastern coast on account of the immense mountains of ice by which it is defended. This circumstance, and the ill success which attended the first attempt of the new settlers to discover any trace of the original colony, had already induced many to regard its history, however circumstantial, as wholly fabulous; when, about the middle of the last century, it was unexpectedly confirmed. At this time the Danish missionaries discovered on the coast the ruins of large stone houses, of churches built in the form of a cross, and fragments of broken bells; they also discovered that the inhabitants had preserved a distinct remembrance of these Norwegians, of the places where they dwelt, of their customs, the quarrels their ancestors had with them, and of the wars which ended in their destruction. Since that time, the attention of the Danish government has been occasionally directed to the investigation of the traces of the eastern settlement, and within the last two years an expedition was fitted out for this express purpose, under the command of M. Graah, captain of a frigate in the Danish navy. Under circumstances of great difficulty, the party succeeded in making their way as far as 65°, where their further progress was entirely prevented by the ice. From 60° to 65° M. Graah found only 500 or 600 inhabitants, and no direct evidence could be obtained concerning the ancient colony. The only circumstance, and that a very remarkable one, which goes to sustain the historical records on this point, is, the physical character of the inhabitants themselves. It is well known that the Greenlander, as hitherto described, presents all the characteristics of the Esquimaux race: namely, short stature, not exceeding five feet; brown or reddish complexion, coal black hair, flattish nose, broad face, small hands and feet, and tendency to excessive corpulence. The men found by M. Graah possess none of these characteristics, but on the contrary are nearly allied in all respects to the Scandinavians of Europe. They are for the most part *above* the middle stature, having the European form of head and expression of countenance. Their persons are meagre, but nervous and finely formed, without any appearance of weakness, and they are more active and robust than the inhabitants of the west coast. The color of skin of the women and children is quite as clear as that of Europeans, and they have often brown hair, which is never seen in the other inhabitants of Greenland. Some of the men allow their moustachios to grow, others tattoo their arms, and all the women have their arms, hands, and chin tattooed, an operation which they execute themselves. Exposed to great physical suffering and very often to famine, they do not appear to live beyond the age of fifty; and the population seems to be decreasing. In their moral character they are very estimable; and the reported good nature of the husbands, submission of the wives, the obedience of the children, and the mutual affection and confidence of the whole people, make it difficult to realise that they are pagans. Polygamy is not common among them; they do not change their wives, and their morals appear to be irreproachable.

We have transferred the above account to our pages, because it appears to us, if correct, to present an important physiological fact. That a people separated during four hundred years from their mother country should during this long period have degenerated so little, as to be perfectly distinguished at once by their appearance from those around them, though exposed to the same physical agents, and obliged from circumstances to adopt their habits and customs, is sufficiently remarkable to be recorded. In other respects the observations made by Captain Graah are highly interesting. He found the extreme of cold in the winter much less than in the corresponding latitude on the western coast, the thermometer not falling below 17° of the centigrade scale or zero of Fahrenheit, and during the prevalence of a south wind, sometimes rising suddenly to 13 cent. or 56 Fahr. On the other hand, the summer he passed there was cold, the highest degree being about 60° Fahrenheit. The inhabitants obtained a precarious subsistence by fishing, but often suffered exceedingly from want. Their food is principally the dried flesh of the seal. Mention is also made of bears, hares, birds and salmon; but M. Graah says that even at the latitude of 63° 36′ reindeer and hares are known only by name. There was more appearance of vegetation than on the western coast, but the growth consisted mostly of sorrel and scurvy grass, with one or two kinds of flowers, and low bushes of willow and birch, of which the maximum growth is two feet. Captain Graah heard of inhabitants farther north, and had hopes of being able to gain some information concerning them.

CHURCH BURIAL.

We have remarked, without the least surprise, some recent trouble about the cemetery under St. Paul's Church in this city. It is said that the air in the church is offensive, and this is supposed to arise from the animal decomposition going on beneath. The same has been remarked, in times past, in other churches that have tombs under them, and we would take occasion again to express our regret that liberty should ever have been given to bury the dead in such places. It is said that an examination of the vaults has been made by the intelligent superintendent of sepulchres, and no offensive odor has been there discovered ; but is it not possible and even most probable that the same impure air which, in the cold cellar, should present nothing perceptibly offensive to the smell, would become very distinctly disagreeable when heated as it is in the body of the church. It would be regarded as a fortunate circumstance if this incident should lead to the abolishment of a practice alike useless and unphilosophical, which can lead to no good and may be productive of injury.

We intend not to enter into a discussion of the much-agitated question which is suggested by the remarks already made, for whatever may be the diversity of opinion among medical men respecting the *precise* influence of animal decomposition in the production of disease, no fact is better established than that a man will live longer and enjoy better health who is never exposed to the results of such decomposition, than if he were often brought into contact with them. We might go further, and say, that whilst the records of medical history present numerous instances of disease and death fairly attributable to animal decomposition, there are few *facts* that tend to invalidate this conclusion. The common argument is, that persons who spend their lives in the vicinity of butcheries, manufactories of adipocire, &c. enjoy good health notwithstanding their constant exposure to the impure air necessarily arising from such places. There are some circumstances that tend to explain this fact, so as to destroy the inference usually drawn from it. How is it, we would ask, that an epidemic or an infectious disease ever ceases to prevail in a place in which it has appeared ? Why is it that Physicians, and still more particularly nurses, usually enjoy a remarkable immunity from these diseases ? It is probably owing to the same law of the system, by which it may be gradually made to bear without injury doses of poisonous drugs, which, taken at the beginning, would be destructive to life. Ardent spirits, opium, laxative medicines, and many other articles ; by their constant use the system becomes gradually insensible to their peculiar stimulus, and at length quantities almost incredible may be swallowed without producing any apparent influence on the body. So does the system, by constant exposure to peculiar external influences, become insensible to them ; and it is in this way we apprehend that nurses reap their immunity, and that the habitual dwellers in an atmosphere which under certain circumstances would poison others, are protected from these baneful effects. We may be made to bear and to enjoy intense cold when it comes upon us by degrees ; but let it come at once, and we need not at this time attempt a detail of its consequences. Certain properties in the atmosphere which are productive of certain states of disease, as in epidemic diseases, act much more powerfully on the system at first than at any subsequent period of their prevalence. At their commencement, epidemics are, usually if not always, more severe and unmanageable than at any other time. As the system becomes gradually accustomed to the poison—if we may be pardoned the expression—which constitutes the peculiarity of the atmosphere at such periods, it becomes less sensible to its influence, and at length it ceases to be affected by it at all, and the epidemic disappears.

If these sentiments are correct, they diminish the force of the argument usually brought forward to prove the innocuousness of animal decomposition. They will show also why it should be deemed unwise to hazard exposure to the result of this change, under such circumstances as were alluded to in the commencement of these remarks.

Animate Contagion.—The first article in to-day's Journal is taken from a work just published in England, in defence of the doctrines there set forth. This work is from the pen of Dr. Adam Neale, and presents more numerous facts in support of the principles he has adopted, than one would suppose could possibly be collected from the records of medical science. Some of these facts we shall present, or an abstract of them, in future numbers, but would recommend the work to those who can get access to it, as one of unusual interest and ingenuity.

Temperature of the Human Body.—Some years ago, Dr. John Davy made a set of experiments with a view of ascertaining the changes, if any, which the temperature of the body undergoes in different parts of the globe; and the result was, that some, though but a slight elevation, occurs in warm climates, and a proportional decrease in cold countries. These experiments were lately repeated by M. Regnaud, of Paris, during a voyage in the eastern hemisphere ; and as the thermometers used were compared by M. Arago with those of the Observatory in Paris, their accuracy cannot be questioned. Four sets of observations were made in the torrid zone, and three in temperate climates ; while all were made on the same twelve individuals, robust and healthy men, fed, clothed, and lodged, in the same manner. In 10 deg. 4′ north latitude, the air being at 79 deg. of Fahrenheit, the average temperature of all the twelve was 99⅓ degrees ; in 36 deg. 10′ south latitude, the atmosphere being 62¼ deg, the average temperature of the men was 98¾ degrees ; under the line, and with an atmospheric heat of

86 deg., the animal temperature was 100 degrees. In latitude 7 deg. 1′ south, the air being at 86 deg., the Body was 98½ degrees; and, again, the air being at 62½ deg., the body was at 99 degrees, and the atmosphere rising to 79 deg., the body rose to 99½ deg. Thus the atmospheric range was from 53½ deg. to 86 deg., which produced a variation in the animal heat of only one degree and a half.

On the State of Chlorides, Iodides, &c. in Solution.—Carlo Matteuci decomposed the chlorides and iodides, by means of the pile, with the expectation of being able to deduce the nature of these compounds when dissolved in water. If it were possible to decompose these combinations by means of electric currents, incapable of decomposing water, one might then justly conclude that their composition was not changed by solution in that liquid. He, therefore, took a pile composed of two elements only, charged with water rendered slightly saline, and which had no power of decomposing water even a little acidulated. The platina conductors were then dipped in a solution of muriate of copper, and after some time, the negative conductor was covered with metallic copper, whilst the positive conductor evolved bubbles of gas. Having replaced the latter conductor by one of silver, it soon became covered with a yellow film gradually changing to violet, which was considered as chloride of silver. The experiment was repeated with the iodides of zinc and iron; the platina poles had scarcely touched the solutions before the iodine, with its distinctive color, appeared at the positive pole, and the metals were reduced, and deposited upon the negative pole.

"After these experiments, it appears," says Mr. Matteuci, "that we may affirm with certainty, that these combinations, even when dissolved in water, do not change in their nature, and are not converted, as is often imagined, into muriates, hydriodates, &c. of the oxides of the metals present.—*Jour. of Roy. Inst.*

Smallpox.—During the last eighteen months, M. Louis has had the opportunity of examining the bodies of fifteen patients who died of smallpox. In eleven of these he found in the bronchia either a false membrane, or a collection of pus or blood. In one-third of the cases there was a morbid development of the glands of Brunner forming exanthematous pustules. In no case were the elliptical plates altered.—*Gazette Médicale.*

Cysts in the Heart.—M. Flandin exhibited to the Anatomical Society of Paris, at their meeting on the 6th of July last, a heart, in the left ventricle of which were cysts containing clots of blood, and the centre of these clots was filled with pus.—*Revue Méd. August*, 1831.

Pustules in the Intestines caused by the internal Administration of Tartar Emetic.—M. Guerard says that he has met with, in two persons treated by large doses of tartar emetic, pustules similar to those produced on the skin by the application to it of that article. These pustules occupied a considerable portion of the intestinal canal; there existed besides no sign of dothinenteritis. The stomach was healthy.—*Ibid.*

Co-existence of Mumps with Leucorrhœal Discharge.—Mr. John Dunn relates in the *North of England Medical and Surgical Journal*, for June last, four cases in which inflammation of the vagina and purulent discharge followed mumps. The first case occurred in a child two and a half years old, the second in a child of four years of age, and the other two were servants. The children neither slept with each other or with either of the servants.

Partial Aneurism of the Heart.—M. Vidal has exhibited to the Anatomical Society of Paris, the heart of an old woman, with a small tumor near the apex of the right ventricle. This tumor communicated with the cavity of the ventricle by a small orifice: it is lined with an organized membrane continuous with that of the heart. It contained recently coagulated blood. The disease was not suspected. The patient died with what are termed asthmatic symptoms.—*Journal Universel et Hebdom.*

Births in Prussia.—During the four years, 1826, 7, 8, and 9, the number of births in Prussia was 2,011,288; being 40,081 births for every million of inhabitants. The greater number of births occurred in the least densely inhabited districts. Of the whole number of births, 988,507 were single, 11,346 twins, 144 triplets, and 3 quadruplets.—*Memorial Encyclopedique, for August*, 1831, *from the Berlin State Gazette.*

Bowdoin College.—We understand that the Legislature of the State of Maine has abolished the office of President of Bowdoin College, and instituted that of Chancellor in its stead,—the office in all cases to be held by a layman. They have also provided that vacancies in the Board of Overseers shall be supplied by appointments by the Governor and Council of the State, and that not more than one-fifth of this Board shall consist of clergymen.

Whole number of deaths in Boston for the week ending February 24, 34. Males, 11—Females, 23.

Of consumption, 7—brain fever, 1—marasmus, 1—lung fever, 5—old age, 4—scarlet fever, 4—measles, 2—delirium tremens, 1—influenza, 1—infantile, 2—dropsy in the head, 1—spasms, 1.

ENGLISH BOOKS.

JUST received, by CARTER & HENDEE, A Dictionary of Chemistry and Mineralogy, with their applications. By ANDREW URE, M.D. Fourth Edition, with Improvements.

A Manual of Analytical Chemistry. By HENRY ROSE. Translated from the German, by JOHN GRIFFIN.

Richeraud's Elements of Physiology, fourth edition. With Notes and Appendix, by J. COPELAND, M.D. Second Edition.

A New Supplement to the Pharmacopœias of London, Edinburgh, Dublin and Paris, forming a complete Dispensatory and Conspectus; including the New French Medicines, and Poisons, with symptoms, treatment, and tests, &c. &c. By J. RENNIE, A.M. A.L.L. Second Edition, revised and enlarged.

Popular Lectures on the Study of Natural History and the Sciences, Vegetable Physiology, Zoology, the Animal and Vegetable Poisons, and on the Human Faculties, mental and corporeal—as delivered before the Isle of Wight Philosophical Society. By WILLIAM LEMPRIERE, M.D. Second Edition, to which have been added two Lectures on the Mammiferous Animals, as since read to the above Society. Jan. 17.

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CHURCH BURIAL.

Curious Instances of Pestiferous Insects.

The Rev. Dr. Render, in his "Tour through Germany," published in London in 1801, observes at page 65—About fifteen years ago, an excellent law was passed and observed with great punctuality at Frankfort, as well as in all other parts of the empire of which the emperor Joseph II. was then legislator, and which deserves to be imitated in foreign countries. This law prohibits the burying of dead bodies in any chapel or church whatever. Neither rank nor opulence can obtain permission to evade it, as in the enforcement of it no respect is paid to persons.

"It is horrid," said the Austrian emperor, "that a place of worship, a temple of the Supreme Being, should be converted into a pest-house for living creatures. A person who upon his death bed makes it a condition of his will to be buried in a church or chapel, acts like a madman; he ought to set his fellow-creatures a good example, and not to do all in his power to destroy their constitutions, by exposing them to the effluvia arising from a corpse in a state of putrefaction."

"How pernicious the burying in churches is to a congregation, *particularly in Protestant churches which are not fumigated* as those of the Roman Catholics are, before and during the service, will appear from the following serious instance of the consequences resulting from it. My readers will, I hope, permit me to suppress the name of the clergyman, and the place where this event took place, as I am very sorry to say, the reverend gentleman, who was much esteemed for his integrity, and well known by his literary genius, proceeded rather too far in the matter. The case was briefly this:—

"In the month of July, 17**, a very corpulent lady died at * * * in ****. Before her death she begged, as a particular favor, to be buried in the parochial church. She had died on the Wednesday, and on the following Saturday was buried according to her desire. The next day the clergyman preached her funeral sermon; the weather was uncommonly hot, and it ought to be observed, that for several months preceding her death, a great drought had prevailed, not a drop of rain had fallen, and consequently it was an uncommonly sultry season. The succeeding Sunday, a week after the lady had been buried, the Protestant clergyman had a very full congregation, upwards of 900 persons attending, that being the day for administering the holy sacrament. The weather still continuing very hot, many were obliged, during the service, to walk out for a time, to avoid fainting, whilst some had actually fainted away. It is the custom in Germany, that when people wish to receive the sacrament, they neither eat nor drink (that day) till the ceremony is entirely over.

" The worthy clergyman preached about one hour and a quarter ; he then consecrated the bread and wine, which ought to remain uncovered during the ceremony. There were about 180 communicants. A quarter of an hour after the ceremony, before they had quitted the church, more than sixty of them were taken ill, several died in the most violent agonies ; others of a more vigorous constitution survived by the help of medical assistance : a most violent consternation prevailed through the whole congregation and town. It was concluded that the wine had been poisoned, and so it was generally believed. The sacristan, and several others belonging to the vestry, were immediately arrested and put in irons.

" The clergyman, on the succeeding Sunday, preached a great deal of enthusiasm, and pointed out to his congregation several others concerned in the plot. This enthusiastic sermon was printed.

" The persons accused underwent very great hardships : during the space of a week they were confined in a dungeon, and some of them even put to the torture, but they still persisted in their innocence.

" On the Sunday following, the magistrate ordered that a chalice of wine, uncovered, should be placed for the space of an hour upon the altar, which time had scarcely elapsed, when they beheld the wine filled with myriads of insects ; and by tracing whence they came, it was at length perceived, by the rays of the sun, that they issued from the grave of the lady who had been buried the preceding fortnight. The people not belonging to the vestry were dismissed, and four men employed to open the grave and the coffin : in doing which, *two of them dropped down and expired upon the spot !* and the other two were only saved by the utmost exertion of medical talents. It is beyond the power of words to describe the horrid sight of the corpse when the coffin was opened. The whole was an entire mass of putrefaction, and it was now clearly demonstrated that the numerous insects, both large and small, together with the effluvia which had issued from the body, had caused this pestilential infection, which was a week before attributed to poison. On this discovery, the persons accused were of course instantly liberated, and every atonement made by the clergyman and magistrate for their misguided conduct." p. 72.

See a pamphlet published at Leipsic, in 1770, entitled Pernicious consequences of burying in churches. Schadlicke Folgen die Toden in Kirchen zu begraben.

In the summer of 1679, a very remarkable disease broke out in the little town of Czierck, in Poland, and its environs, caused by some unknown winged insects ; the stings of which wounded mortally both men and animals. Thirty-five persons and a great number both of horses and horned cattle perished in this district only. These insects suddenly alighted upon the uncovered parts of the body, such as the face, neck, and hands, and stung severely. Speedily hard tumors arose, and if within the first three hours these were not removed, either by means of the actual cautery, or knife, all other means proved unavailing, and the persons stung died a few days afterwards.

These insects had four wings, and six feet, and a long stylet issued from behind, enclosed in a sheath, which opened longitudinally in two divisions. Some were marked on the back with yellow rings, but others were entirely black, and the latter were the most poisonous. They were so very tenacious of life, that it was difficult to kill them. Fortunately they disappeared during a north wind. It was believed that they proceeded from some pestilential carcase. (O Zanam Hist. Med. des Mal. Epidem. Tom. 5. 272, also Ephem. Natur. Curios. Ann. IX. Obs. 184.)

In the first volume of Dr. Southey's Omniana, p. 75, is the following passage, entitled Tomb Flies :—

When the French, in their war with Pedro of Aragon, took Gerona, a swarm of white flies is said to have proceeded from the body of *St. Narcis*, in the church of *St. Phelin*, (I copy, says Dr. S., the names as they stand in the Catalan author Pere Tomich. ff. 39,) which stung the French, and occasioned such a mortality, that they evacuated the city. This is so extraordinary a miracle, that there is probably some truth in it, because miracle-mongers have never the least invention, and because a curious fact in confirmation of it is to be found in the Monthly Magazine for December, 1805. "In preparing for the foundation of the new church at Lewes, it became necessary to disturb the mouldering bones of the long defunct, and in the prosecution of that unavoidable business, a leaden coffin was taken up, which on being opened, exhibited a complete skeleton of a body that had been interred about sixty years, whose leg and thigh bones, to the utter astonishment of all present, were covered with myriads of flies (of a species perhaps totally unknown to the naturalist) as active and strong on the wing as gnats flying in the air, on the finest evening in summer. The wings of this nondescript were white, and for distinction's sake the spectators gave it the name of the coffin fly. The lead was perfectly sound, and presented not the least chink or crevice for the admission of air. The moisture of the flesh had not left the bones, and the fallen beard lay on the under jaw."

In the second volume of his Omniana, Dr. Southey says there is a curious passage in the adventures of Robert Drury. An insect like a cow-tick, called *poropongee*, is found in that part of Madagascar which the Virzimbeers possess, and in no other part of the country. Its bite is said to occasion an illness which lasts six or eight weeks, *but to which no person is subject a second time!* and the Virzimbeers took care not to destroy this insect, because they found it a good protection against their neighbors who used to invade them. Vol. 2, p. 262.

There is a fact stated in Dr. Dover's *Ancient Physician's Legacy*, which although not quite similar to the foregoing, yet as it serves as an illustration, seems to be well deserving of our attention, and shall therefore be quoted. Dover, it may be here stated, was an extraordinary character, and united in his own person the very incongruous professions of physic and buccaneering. He says, "when I took by storm the two cities of Guayaquil, under the line in the south seas, it happened that, not long before, the plague had raged amongst them. For our better security, therefore, and the keeping our people together, *we lay in their churches*, and likewise brought thither the plunder of the cities:" "*we were very much annoyed with the smell of the dead bodies.* These bodies could hardly be said to be buried: for the Spaniards abroad use *no coffins*, but throw several dead bodies one upon another with only a drawboard over them; so that it is no wonder that we caught the infection."

"In a few days after we went on board, one of the surgeons came to acquaint me, that several of my men were taken after a violent manner, with that languor of spirits that they were not able to move. In less than forty-eight hours we had in our several ships 180 men in this miserable condition," &c. &c.

DISEASED SPINE.

Case of Diseased Spine. By Thomas Sewall, M.D., Professor of Anatomy and Physiology in the Columbian College, D. C.

The following case of spinal affection occurred in the infant son of M. E. Hersant, Esq. Consul of France to the United States, a child equally remarkable for the premature development of his mind, the native stamina of his physical constitution, and the patience with which he sustained the extreme sufferings occasioned by a complicated train of morbid affections.

The case did not come under my care until a late period of the disease; I therefore avail myself of the notes which were made by Madam Hersant, and which she has kindly put into my hands for the benefit of the public. I am happy to find her journal of the case so full and circumstantial as to furnish every fact at all material in giving a faithful detail of its history.

Alexander, the little patient in question, was born in March, 1827, and was a healthy, well-formed child. At the age of two weeks, he was severely affected with the thrush, from the consequences of which he did not recover for nearly nine months, but upon the approach of the first winter his health returned and he became vigorous and robust. In July following he contracted a catarrhal affection, which left him with a febrile habit, that continued till late in the autumn; and the winter in 1829, found him a great invalid, affected with sleepiness, flushing, fever, and diarrhœa, and this state continued till he was removed to Georgetown in September. Soon after this period, he was seized with occasional turns of vomiting, accompanied with a febrile habit, a dry cough and with indigestion. About the same time also, it was remarked, that he had acquired the habit of raising his body erect, or of throwing it backwards, as if to relieve some uneasy sensation; and that he was losing in some degree the power and activity of his lower extremities, was evinced more especially by stumbling as he walked; but late in the autumn, his general appearance was improved, and he enjoyed comparatively good health for two or three months. Early in February, 1830, it was observed for the first time, that he manifested uneasiness from the exercise of riding in a carriage, and that he could not endure being jolted upon the knee, or lifted by the arms. On making an examination to ascertain whether there was not some strain or dislocation which would explain the embarrassment under which he labored, a small protuberance was discovered over the spine. About this time a great irritation of the bladder occurred, accompanied with pain, a frequent desire to void urine, and a shuddering when it was discharged ; this affection increased in its severity to the close of life. About the same time the abdomen became tumid and tense, and his sufferings were augmented by an attack of the measles, then epidemic in the city, which left him with increased debility, cough, and fever.

In March, 1830, I was called upon to give my opinion with respect to the nature of the tumor upon the back. Upon examination, I found the spinous process of the superior lumbar vertebra slightly projecting, with a small but obvious curvature of the spine. There was tenderness from pressure over the projecting part in its neighborhood, and his motions seemed to be restrained, feeble, and tottering. There were also evident marks of hectic irritation. The nature of the case was too obvious to be mistaken, and I did not hesitate to pronounce it an affection of the spine, and one which would result in a caries of the vertebræ, and in an extensive deformity, if not in death, unless arrested in its progress.

With respect to the treatment, it would be both tedious and unsatisfactory to trace it through the various changes of a case so protracted and complicated. I would only observe in reference to the spinal disease, that issues were introduced on each side of the affected vertebra, in May, 1830, and other topical and general remedies were used. Still the disease advanced with a slow, but steady progress, evinced by the increase of fever, loss of appetite and strength, emaciation, irregular bowels, paroxysms of spasmodic pain, enlargement of the abdomen, and increased curvature of the spine.

In October, 1830, the little patient was taken to Philadelphia, and placed under the care of Dr. John K. Mitchell, a gentleman to whom our country is largely indebted for his extensive investigations, and successful method of treating this most formidable disease.

When the patient was first placed under Dr. Mitchell's care, he was suffering under the pressure of a severe hectic, accompanied with a tumid abdomen, and diarrhœa, of which the discharges were purulent. The pus appeared like that which usually escapes from strumous cavities, and was supposed to come from an abscess connected with the carious vertebra. His appetite was feeble, his respiration hurried and irregular, his skin unequally active, his muscular strength almost entirely gone, and his motions even on the bed to which his debility confined him, were painful. From a belief that issues are often injurious in exciting and keeping up hectic irritation, an opinion, says Dr. Mitchell, derived from long observation, they were closed as soon as possible. To correct the irritated state of the intestinal action, a small blue mass pill was given every evening, and the diet was rendered as simple as possible. But as no visible improvement followed these measures, the little patient was subjected to the use of the spine cart, a remedy which has given signal relief in many cases of painful caries of the spine, detailed in the communications of Dr. M. already before the public. Its application was quite as beneficial as anticipated. To use the language of the observant and intelligent mother, the swelling of the abdomen subsided, the pains left him, the fever abated, and the discharges became in other respects healthy, although the purulency was not materially diminished. These changes took place in three days after the application of the spine cart. At the end of six weeks, his whole appearance was so much improved as to afford a rational hope that the patient might finally attain health and a solid spine. When he arrived in Philadelphia, it was necessary to avoid the slightest jolt ; but before his departure for Washington, he rode about the streets of Philadelphia, without making any complaint. The weather on his journey homewards was both wet and stormy, and the necessary exposure brought on a severe catarrh, with fever and pain, attended with a loss of appetite, and a diminution of flesh and strength. But in the beginning of January, 1831, these symptoms abated, and he began to recover his appetite and flesh, and his bowels became more regular, although the passages were still charged with pus. From the time he returned from Philadelphia, at which period he first became my patient, the spine cart was applied from three to five hours daily for several weeks, and with evident benefit ; but in the early part of March, he was again affected with cold, which brought on a return of all his unfavorable symptoms with increased violence, and from this time the use of the cart was necessarily abandoned. The fever returned, accompanied with loss of appetite, thirst, fatigue of the lower extremities, great debility and sleepiness. The discharge of pus from the bowels became more copious ; the urine was also rendered turbid by its presence, and deposited large quantities of matter when cold. He continued to linger, becoming more and more exhausted, till the 12th of July, when he died in a state of extreme emaciation.

Post-Mortem Examination.—Twenty-four hours after death, I made a careful examination of the body, in presence of Drs. Washington and Bohnen, and discovered the following appearances :—On laying open the abdomen, the liver, spleen, and small intestines alone, were found in a healthy condition. The large intestines, in their whole extent, were thickened and changed in their organic structure, being contracted in some parts, and enlarged in others ; with their different convolutions, where they came in contact, firmly adhering. The whole of the mesentery was thickened, and its glands enlarged to the size of grapes. The pancreas was also slightly enlarged and diseased in its structure. The left kidney was in a healthy state, but the right was enlarged to four times its natural size, with its ureter irregularly dilated to three-fourths of an inch in diameter, its coats the fourth of an inch in thickness, and of a cartilaginous thickness. The bladder was diminished in its capacity, and distended with urine and pus ; its coats were thickened, hard, and elastic, and its mucous surface studded with small, white tubercles. Behind the peritoneum, and in the direction of the right psoas muscle, we found a mass of caseous matter, extending from the diseased vertebra to the right sacro-iliac junction. The large intestines contained a considerable quantity of pus, and a communication was found to exist between the diseased vertebra and the arch of the colon, where it crosses the spine, by which the matter made its way into the cavity of the intestines. On removing the intestines, a greater part of the bodies of the two superior lumbar vertebræ, with the intervening cartilage, were found destroyed by the disease, and the vacuity created by the caries filled with pus.

Observations.—In reviewing the foregoing case, the following observations seem naturally to present themselves to the mind.

1st. The importance of an early attention to the premonitory diagnostic symptoms of spinal disease, in order that the appropriate remedies may be applied before caries or curvature take place, for it is in this early stage only, that medical treatment can be relied on with confidence. Whenever, therefore, fever becomes chronic, or is obstinate, without the detection of an adequate cause, the vertebræ should be carefully examined by pressure. If no tenderness be discoverable, we may safely infer the absence of spinal irritation, unless the frequent and soothing motions of the spine, the often sought recumbent posture, and the shuffling gait, determine the application of remedies to the spine, even though no tenderness be discovered by the pressure.

2d. The immediate and complete relief from pain and other unfavorable symptoms by the suspension in a spine cart, while a recumbent posture did not abate one morbid symptom, shows that the state of entire rest and horizontal position, so strongly insisted on by the highest medical authority, is not entitled to unqualified approbation, and that these two apparently opposite modes of cure demand a fuller experimental investigation.

3d. That although a single case cannot be quoted as adequate testimony in favor or against any particular mode of treatment, yet the unabating progress of the disease while under the application of issues, a remedy also established by long usage, and advocated by high authority, while an arrest of the disease was effected by a remedy less painful, and better adapted to the undisciplined years and tender condition of the sufferer, should cause the profession to pause and to reconsider well the propriety of their application.—*Amer. Journ. Med. Sci.*

CHOLERA.

Remarks on Cholera. Communicated for the Boston Medical and Surgical Journal. By Moore Hoit, M.D.

" What can we reason, but from what we know ? "

In all researches after truth, common sense gives observation the precedence to theory ; but when the importance of the object to be attained is only equaled by the difficulty of its discovery, and observation fails to penetrate the thick darkness in which it is shrouded, theory may certainly be permitted to offer the aid of its humble services in the investigation.

It is now fifteen years since the Cholera has commanded the anxious attention of some of the first medical talent in the world ; but what has been done to arrest its progress, or disarm it of its terrors ? Absolutely nothing ; it still advances, in defiance of the feeble attempts hitherto made to elude its grasp or struggle against its embrace.

In such cases, mankind, in their consternation, are always prone to confound things; and in this instance, appalled by the great mortality of a pestilence so unlike anything they have hitherto known, take for granted, that, *in its nature*, it is a different *kind* of evil from any with which they have before contended, and which must either be submitted to with sullen patience, or opposed by means as yet unknown. But let us make the inquiry whether this be a *new* species of *morbid action*, one *peculiar to itself*, or whether it be *similar* to the morbid actions that obtain in other cases, in the same structures, and *differing* from them *only in degree*. If the characteristic features of this disease, either separately, or in the aggregate, find no parallel in pathology, then, but not till then, let us loose from our moorings, throw overboard as useless those charts and observations which have cost us so much time and labor, and launch at once upon the broad ocean of conjecture, without even the dim twinkling of a star to steer by.

We have for a long time in this country been familiar with a disease called cholera, produced, as we believe, chiefly by atmospheric influence, appearing only in the summer, and generally if not always sporadic. Although the Indian cholera appears as an epidemic, and that in winter as well as summer, it does not necessarily imply a difference in the nature of the disease, but only in the manner of its production. Again, the Indian cholera is commonly fatal, and often so in a few hours; the American not necessarily fatal, and seldom so under several days. Now so far, the difference consists in the epidemic and fatal character attached to the one, and not to the other,—discrepancies which occur in other diseases, which we do not on that account consider, or treat, as differing in the nature of their morbid action. We often find our cholera apparently produced by different exciting causes, and sometimes when the atmospheric or predisposing cause is not supposed to exist; still, as all these causes, when brought to bear upon the same structure, produce the same ultimate effect, we do not think ourselves justified in giving to each of these a new name, or instituting in each a new treatment. It may, however, be said, that here is not only a different cause, but in fact a totally different disease. As it regards the nature of the cause of Indian or American cholera, or indeed of almost any other disease, the less physicians pretend to know of the subject, the better will their pretensions harmonise with their knowledge. That diseases, when epidemic, are more *severe* than when sporadic, is a point well established; but that therefore they differ in the *kind* or *mode* of *morbid action*, I deny altogether.

The influenza, which we have so lately witnessed, will serve to illustrate my meaning. In this instance it will readily be conceded, that we have a disease differing in no respect, except *in degree*, and in the manner of its production, from the common catarrhal affection, familiar to every man, under the name of "a cold." The same parts are affected, the same symptoms are exhibited; but while the one is safely left to the efforts of nature, the other *may* require prompt and active medication.

I make these remarks with a strict reference to practical results; for if this point can be established, that we have in the epidemic cholera *no new mode of morbid action*, then is this frightful pestilence deprived of half its terrors, for I believe it must be admitted that for almost every *known variety* of morbid action, *we have the appropriate remedy.* That we are often baffled in the application of the remedy, is no objection to the position. The same morbid action produces different results in different textures, and in some of these, disease is death. In such cases the physician rightly considers himself as a mere spectator, and although he may regret his inefficiency, he can no more reproach his art with it, than of its failure to confer immortality. Perhaps we may not be able, in some instances, to recognise the *kind* of disease, in others, its seat: in such, if we act either boldly or feebly, guided alone by conjecture, let the charge of failure rest where it plainly belongs. But there can be little doubt respecting the most important location of the cholera; it evidently chooses for its chief scene of action, the stomach—a field which is occupied every day, for sport or for war—an arena where the "Sampsons of medicine" have often contended with the Philistines of disease.

The prominent features of the Indian cholera, as far as my information extends, are,—pain in the epigastrium, indicative of spasm in the stomach and collatitious organs, sinking of the pulse, coldness of the surface, vomiting of a fluid not bilious, spasms of the voluntary muscles, and general prostration; death more commonly occurring in a *prostrated*, than in an *exhausted* state of the system. Now we have precisely the same state of things in common cholera; with this exception, that as the symptoms in the latter are less intense, life is seldom extinguished in the first instance, and when death does ensue, it is in an exhausted state of the system, the consequence of a protracted continuance of the disease.

It has been remarked, apparently by those who wish to establish the doctrine of a new kind of disease, that in the epidemic cholera the vomiting, which in common cholera is the most important symptom, is a thing of minor consequence. Can we regard a constant vomition which rejects nothing but a glairy, rice-water-like fluid, a thing of little moment, when we reflect that it is almost impossible to excite the same act in other cases by means so gentle as not to occasion the evacuation of bile?—Surely this shows an almost unparalleled degree of disease of the chylopoietic viscera, and the vomiting must be, of necessity, a most important circumstance.

In common cholera the obstructions to the flow of bile are so slight as to be easily overcome by the efforts of nature; but in the other it appears those efforts are unavailing. With the derivation of words in such cases we have nothing to do; universal practice in modern times, sanctions the application of the word cholera, to the associate acts of vomiting and purging, whether bile be present or absent. Upon the whole, I am satisfied by the comparison, that no greater difference exists between the phenomena exhibited by these two diseases, than between the common and the epidemic "cold." If then the American and the Indian cholera exhibit the same morbid action, only differing in degree, why should we not expect similar results from the application of the same principles of practice, proportioning the *energy* of the *means* which those principles dictate, to the *increased energy* of the diseased action.

Now the American cholera *has been cured*, and *can be cured*, every day during the season of its prevalence. We cure the spasm and pain and vomiting, and cause a determination to the surface, by those remedies which for *ages* have been known to be capable of effecting these objects ; the chief of which is opium. The curative effect of opium is well seconded by large doses of calomel, by alcohol, and the external application of heat and other stimulants.

There is one point in the treatment of diseases, which appears to me to be too much overlooked, especially by writers, and that is, the importance of making an impression upon the system, that shall be in degree more intense than the diseased impression, without particular regard being had to the kind of impression, or the agent by which it is produced. Counter-irritation would express the idea, were there not already attached to this phrase, by the profession, a practical definition, which falls far short of that I would give it. The apparently different modes of curing intermittents will illustrate my meaning. Here we find that the larger the quantity of bark or arsenic, that can be exhibited with safety in a given time, the more sure we are of producing the desired result. Divesting ourselves of the absurd notion, that these remedies, *thus exhibited*, act by a tonic property, we can easily account for the cures ascribed to the sudden immersion in the cold bath ; to emetics ; to electricity ; to sinapisms to the extremities ; to large doses of alcoholics, and to mental impressions. It appears to me that the application of this principle to the treatment of cholera is strongly demanded, and while we may perhaps rely upon other remedies for the ultimate cure, we should endeavor to make some kind of impression upon the system, which, by being more intense than the morbid impression, will at least retard its progress in accordance with a well known law of the system, till more appropriate remedies shall have time to produce their peculiar effect. This perhaps can be accomplished by the internal and external use of the acrid, pain-giving stimulants ; such as the essential oils, undiluted brandy internally, and the actual cautery and similar means externally.*

These views appear to me highly important, inasmuch as they are founded on the acknowledged principles of therapeutics, and *so* far at least preferable to the miserable empiricism which prescribes *cajeput oil* and *poultices of hemp seed* as specifics in cholera. It is very evident that a disease possessed of such concentrated virulence as epidemic cholera is represented to be, must be combated with heavier and sharper weapons than one of less malignity.

If then in our cholera an hundred drops of laudanum are found necessary to arrest the disease, it is unphilosophical to expect that thirty will do as much in the epidemic, and it is certainly ungenerous to lay the blame of failure on the *innocent* remedy, when it ought to attach to the fear-stricken heart and trembling hand of the prescriber. In the extract from " Advice to families, for the prevention and cure of Cholera," signed by Sir Henry Halford, president of the English Board of Health, published in No. 22, Vol. 5, of this Journal, it is recommended "in *severe cases*" to administer from twenty to forty drops of laudanum. Now should a "severe case" of American cholera be left to such a prescription, and the patient recover, it would certainly be ascribed to the tender mercies of Providence, without regard being had to the agency of the physician. Severe cases of *American cholera* require from 60 to 100 or 120 drops of laudanum, and not unfrequently that to be repeated; but severe cases of Indian are to be put off with 20!! There is scarcely an intelligent matron, in this country, who would not laugh at Sir Henry's prescription in "severe cases."

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* Since writing the above I have seen the statement made by Dr. Barry of the success of Dr. Lange's practice with the actual cautery applied to the spine. It is evident to those who are familiar with the uncertainty of medical opinions, that, although the doctor may be right in his views of the proximate cause (as he evidently considers it) of cholera, yet possibly he may be wrong. Should the theory not prove true, the really excellent remedy which is based upon it must fall ; but on the other hand, if the remedy is used in conformity with the law of impressions (for the philosophy of which I believe we are indebted to Hunter), it must be tried on its own merits.

Tartrite of antimony is another remedy, the established character of which, promises much in Indian cholera. As far as relaxation of spasm, and determination to the surface are desirable, it harmonizes admirably with opium, as for example in the treatment of colic. In our cholera it is inadmissible in *severe* cases, by reason of the exhaustion produced by the disease, and in the *mild* cases it is not wanted; but if the *supposition* be correct, that in the severe cases of the Indian disease, the patient dies, not from exhaustion, but prostration, the objection does not hold. Perhaps it will be objected, that to produce vomiting when it is already an alarming symptom, would be not only wrong in principle, but absolutely rash in practice. Reflection may convince us that this is not in fact so much opposed to principle as it might at first thought appear. As far as analogy can justify anything, it will this practice. Take, for instance, dysentery; it would sound oddly in the ears of American physicians at the present day to object to the administration of twenty or thirty grains of calomel, because purging is one of the most remarkable and obnoxious features of this disease.

In most of our remedial attempts on the human system, our object is to substitute an artificial or remedial action in the place of the morbid one, though in appearance closely resembling it, which from its nature will gradually give possession to the healthy action. On no other ground than this, could the practice which was for a long time so general of administering small doses of mercurials in fever, be for a moment justified—by no other reasons can the efficiency of the same remedy in the venereal disease be accounted for. With regard to the stomach, we find not uncommonly in ordinary cases of sickness of that organ, severe vomiting to ensue, and that repeatedly, without the relief of the symptom that an emetic at once affords. Finally, ought we to draw no indications from these rice-water-like vomitings?—may not we consider these agonizing efforts of suffering nature, as inefficient attempts by the stomach to obtain for the chylopoietic viscera their accustomed stimulus of bile?—and are we not borne out in this hypothesis by the acknowledged fact, that where bilious vomitings do occur in cholera, the patient generally recovers? Thus, whether it be to relax spasm of the biliary ducts, or of some other of the chylopoietic viscera, or whether to determine to the surface, or whether to produce a remedial impression simply—may not one or all these desiderata be obtained by a full vomiting dose of emetic tartar? To my mind this promises much more than "*Transfusion*," or the "*Injection into the blood of oxygenating salts.*"

My object in making these remarks has not been to advance any precise rules of treatment, but rather, by the mention of a few remedies as they occurred to my mind, to endeavor to call the attention of physicians from the worse than childish search for specifics, to the fixed principles of their science. Those principles must be valuable, for I cannot believe that all our anxious labor in the investigation of them has been in vain, or for the purpose of acquiring the " form " of wisdom, " without the power." What do we so painfully learn—what so gravely teach—if all our knowledge and all our precepts are to be blown from us by the first wind that bears on its wings an unusual form of disease ?

New York, *February* 27, 1832.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, MARCH 7, 1832.

Researches principally relative to the Morbid and Curative Effects of Loss of Blood. By Marshall Hall, M.D., F.R.S.E. &c. &c.

We have offered from time to time short extracts from Dr. Marshall Hall's work upon the effects of bloodletting. This is evidently the production of a practical man, who has witnessed, at the bedside, the phenomena which he describes; and the conclusions seem to be formed upon a careful and patient examination of facts. Although our extracts from and notices of the work have doubtless been treasured up by the reader, yet the practical importance of the subject is such as will perhaps warrant our giving a sketch of the leading principles it maintains and doctrines which it inculcates. Among them are the following:—

1. Exhaustion from loss of blood may be followed either by deficient or excessive reaction. In the latter case the symptoms are those of cerebral excitement; as violent throbbing headache, confusion and giddiness with intolerance of light and sound. This effect occurs generally in the young and robust. In infants and in feeble persons reaction from loss of blood is apt to be defective. Either of these states may be followed by sinking. The symptoms which characterize this last state are those of irritability of the nervous system; as intolerance of light and noise, violent throbbing of the carotids, &c. At a later period of exhaustion there is labor in respiration, stupor, snoring, &c. A general effect of exhaustion from loss of blood is rapidity of the pulse.

2. It seems probable that a certain balance of the circulation of the brain is necessary for the healthy condition of its functions; that these are equally impeded by the interruption which takes place in apoplexy, and by the diminished impulse which occurs in an opposite state. Syncope itself is preceded by giddiness, tinnitus aurium, and impaired vision; and accompanied by blindness, dilated pupil, perfect insensibility; and frequently

passes into convulsion. It differs then from apoplexy, chiefly in the state of the general circulation, the symptoms accompanying the two being remarkably similar, and the effect upon the sensorial powers almost precisely the same.

3. Each successive bloodletting is attended with increased risk. There is considerable danger when the reaction is strong, still greater when it is feeble. A large bloodletting in the last case may be followed by sudden death. There is great danger when fainting has been several times induced, and when there is the least tendency to want air.

4. The power of the system to resist the loss of blood varies according to many circumstances; but, cæteris paribus, according to the presence or absence of disease; and when present, according to its nature and seat. In some diseases a greater loss of blood is borne than in health, in others less. According to this circumstance, a scale of diseases might be formed, commencing with cerebral congestion, and going through serous and parenchymatous inflammation, and acute anasarca, to the state of health. Below this would be arranged fever, the effects of intestinal irritation, some cases of delirium, reaction from loss of blood, and disorders of the class of hysteria, dyspepsia, chlorosis, and cholera.

5. The quantity of blood which flows when a patient is placed upright and bled ad deliquium, seems accurately proportioned to the exigencies of the case. In inflammation much blood should be taken; and much will flow before deliquium is induced: in irritation, little blood should be drawn, and there is early syncope from bleeding. In this way the quantity is also suited to the powers of the system. For this reason, whenever full bleeding is to be practised, the patient should be placed perfectly erect in a chair or in bed.

6. The stimulus of inflammation both renders it more difficult to induce syncope, and protects the system from the more remote consequences of bloodletting. These effects, however, are very likely to recur at the moment that the stimulus of the inflammation is withdrawn and the system is abandoned to its own forces. At this period, therefore, the farther abstraction of blood is in the highest degree dangerous.

Such are some of the principles laid down by Dr. Hall in regard to the effects of bloodletting upon the human system. The following extract from the latter part of the work, contains some views which are in a degree original, and which appear well worthy of the consideration of the profession. After giving an account of several cases presenting more or less the aspect of inflammation, but requiring a different mode of treatment, he proceeds as follows.

"The preceding cases are sufficient to establish the fact that there are attacks which resemble inflammation of the head, chest, or abdomen, and yet are totally different in their nature. This fact is, of itself, highly important. And if I should fail in giving sufficient diagnostic marks of these morbid affections, it will still be of the utmost moment to know, that the distinction is absolutely essential to the adoption of an appropriate mode of treatment; and that whilst we appeal to future experience to render the diagnosis more complete, the peculiarities of each individual case must be carefully seized in order to supply the deficiency of general rules.

I would first observe that the attack of irritation is, in general, more sudden than that of inflammation, which is usually formed somewhat more gradually. This circumstance must therefore be cautiously inquired into, and may assist the diagnosis.

I believe, too, that the seizure in the former case is attended by more distinct rigor, and afterwards by greater heat, than in the latter.

The case of irritation affects, in a marked degree, more organs at once, than that of inflammation, which is usually confined, at first at least, to one.

The state of the tongue and the condition of the alvine evacuations are far more marked by disorder, and the latter are far more offensive, in attacks from irritation than in cases of inflammation.

The affection of the head from irritation comes on suddenly, is formed all at once, and is frequently attended by great restlessness, suffering, and distress, and there is early syncope on taking blood. In arachnitis, the disease is usually formed somewhat more gradually; the patient has been subject to pain in the head perhaps for some days or even longer; he complains less; or at least there is less urgent distress,—less distress of a general kind; the pain may be very severe, although it is more frequently rather obscure; the intolerance of light and sound is less urgent; the rigor, and subsequent heat, and the attack in general, are less marked; the patient is not so soon relieved by remedies, and the tongue and alvine evacuations are less morbid, and there is, especially, great tolerance of loss of blood. In the attack of affection of the head from irritation, the patient is relieved perhaps completely if the lancet be employed, but the attack soon recurs with equal or greater violence; in arachnitis, the relief is seldom so complete, the interval of ease so long, or the return so marked; the pain is diminished, perhaps, but gradually resumes its former violence, unless active measures be interposed.

When the chest is affected from irritation, the pain is severe and acute, and perhaps increased by a full inspiration; if the inspiration be repeated, however, a second and a third time, the increase of the pain is less and less; the situation of the pain varies; there is no cough, no crepitus on making a full inspiration. In all these respects the case differs from inflammation. The remarks already made respecting the relief from remedies, the effect of bloodletting, the tendency to a sudden recurrence of the pain, &c. in cases of affection of the head, apply equally here.

I had long remarked that there might be both acute pain and tenderness under pressure, of the abdomen, without inflammation; this state of things is frequently the result of intestinal irritation. It is distinguished from inflammation by the general symptoms of this affection, the mode of attack, the effects of remedies. In inflammation, the surface is usually cool, the head unaffected, the patient remarkably quiet; in the case of irritation, on the contrary, there is generally much heat after rigor, the head is much affected, and the patient is restless and generally distressed, the tongue loaded and perhaps swollen, the alvine evacuations extremely morbid, and great relief is obtained by the free operation of medicine."

GROG SHOPS.

There is no more flagrant nuisance in this good city than the petty grog shops which meet the eye and offend the olfactories at every corner. Notwithstanding the various and efficient measures which have been adopted of late years to suppress that most odious and disgusting vice which is conceived, and born, and nurtured, in these pandoric boxes, there never perhaps was a time, when there were in this place so many of these lounging places for the idle and depraved, as at present; there still exists a fearful measure of tippling, idleness, rudeness, and depravity, among a certain class of our young men. This is believed to be a fact, and we apprehend the most intelligent and observing portion of the community will bear testimony to its correctness. Six if not sixteen of these shops are licensed, where one should be, and many are the glasses of intoxicating liquor hourly dealt out from places that have received from the city government no licence whatever. Even at rooms so public as the starting places of the " hourlies " that leave the city—in the same apartment that we must enter to leave directions on the slate,—decanters, filled with the tempting liquors, are arranged on shelf above shelf.

Whilst all are deploring these circumstances, and devising means to prevent so serious an evil, it may be pardoned us if we suggest that every person who retails spirits by the glass, should be compelled to keep his shop in some conspicuous situation, and have a sign over his door, with the words GROG SHOP on it in large and plain letters. Our chief reason for this suggestion is, that persons of good character and good habits, are gradually led into the practice of tippling by the temptation offered them at necessary visits to grocery stores. At length, they imagine they may indulge without being suspected of resorting to such places with any other intention than to purchase a pound of sugar or of tea. Under this effectual protection, they glide into habits which their sense of character and love of a good name might have prevented them from contracting, if the plan we propose had been in vigorous execution.

Directly opposite our window is a pitiful *grocery* " licensed to retail spirits; " and within the last six years we have seen men of family, character, and even literary pretensions and reputation, gradually led on in the course we have described, until they have become confirmed drunkards. Let it not then be deemed an idle dream, or a mere speculation, when we state our belief that the root of the evil is in combining *grog-shops* and *groceries:* we speak from observation, and would most earnestly invite the attention of the public to the necessity of separating wide apart these two kinds of establishment;—let the grocery be such in its purity, and let the grog shop be so plainly designated, that no one can enter it without his errand being known, and no one be led into it by the ordinary calls of his family.

Surgical Operation.—A very large steatomatous tumor, weighing more than three pounds, and in the shape of a placenta, was extracted last week from the shoulder of one of the inmates of the House of Industry at South Boston. The operation was performed with perfect success by the intelligent surgeon of the establishment, whose reports of instructive cases have from time to time been published in this Journal. The patient bore the operation well, and is now in a fair way to recover his health.

Cyclopedia of Practical Medicine.—This work promises to be one of great value. It is published monthly in London, at five shillings sterling a number, and sold in this country for $1,12½. The first No. is arrived and fully meets our expectation. We understand, however, that it is to be republished in Philadelphia, and the American copy will probably be afforded at a less price. At a subsequent period we shall offer a more minute account of this Cyclopedia.

☞ We shall be happy to hear oftener from the writer of the interesting paper on Cholera, which will be found in the Journal of to-day.

Whole number of deaths in Boston for the week ending March 3, 24. Males, 14—Females, 10.

Strangled, 1—dropsy, 1—lung fever, 3—unknown, 2—influenza, 2—consumption, 4—infantile, 1—throat distemper, 1—dropsy on the brain, 2—scarlet fever, 2—croup, 2—drowned, 1—measles, 1.

ADVERTISEMENTS.

RYAN'S MEDICAL JURISPRUDENCE.

JUST published and for sale by CARTER & HENDEE, A Manual of Medical Jurisprudence, compiled from the best legal works; being an Analysis of a Course of Lectures on Forensic Medicine, annually delivered in London by MICHAEL RYAN, M.D., Member of the Royal College of Physicians, London, &c. &c. First American Edition, with notes and additions by R. EGLESFELD GRIFFITH, M.D., Lecturer on Materia Medica and Medical Jurisprudence in the Philadelphia School of Medicine. March 7.

THE CYCLOPEDIA OF PRACTICAL MEDICINE,

EDITED by JOHN FORBES, M.D., ALEXANDER TWEEDIE, M.D., JOHN CONOLLY, M.D. English edition, published monthly. No. 1, for January, 1832. Subscriptions received by CARTER & HENDEE. March 7.

THE CEREBRO-SPINAL AXIS OF MAN, with the origin and first divisions of its Nerves. From the French of M. MANEC, D.M.P., Lecturer on Anatomy and Operative Surgery, &c. at Paris. Translated and revised by L. PANCOAST, M.D. Just received by CARTER & HENDEE. March 7.

LIZARS'S ANATOMICAL PLATES. CARTER & HENDEE have for sale an English copy, well bound. March 7.

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SYNCOPE AND CEREBRAL CONGESTION.

Observations on Syncope and Cerebral Congestion. By M. Piorry.

The above subject occupies the fifth section of M. Piorry's Collection of Memoirs, and deserves some notice in this Journal.

1. *Causes of Syncope.*—The general opinion, corroborated by Bichat, was, that syncope was entirely owing to suspension of the heart's action. But it is to be remembered, says M. Piorry, that many of the exciting causes of syncope, as moral impressions, odors, the sight of disgusting objects, &c. can only act on the brain or the organs of sense. Is it the same in syncope from hæmorrhage ? Let us, says our author, interrogate the facts. It is rare that, in syncope, the action of the heart completely ceases. In hæmorrhage, the cerebral functions fail before the contractions of the heart. The latter organ beats a long time, though feebly, after the sensorial functions are suspended. The heart is found to beat for some time after an animal has been bled to death. If a man or animal be kept with the head elevated, after a considerable quantity of blood has been lost, syncope will take place, although the heart will be heard to beat in the chest, and even the pulse felt in the arteries of the lower extremities. "It is, therefore, in the brain that lipothymia commences." If we lower the head, and raise the inferior extremities, syncope will cease—hence we may conclude, that it is the restoration of cerebral excitement which puts an end to syncope. Those syncopes (says our author) which are produced by certain moral impressions and sensations, are evidently the result of defective action in the brain, the same as in the other cases. Pullen, indeed, separates these two kinds of syncope, placing those from hæmorrhage to the account of the heart—those from moral impressions or physical sensations to the brain ; but Bichat, with whom our author disagrees, traces both classes to the same organ—the heart—M. Piorry, to the brain, conceiving that the heart is only secondarily affected.

Diagnosis of Syncope from Cerebral Congestion.—To discover that an organ is suffering requires not much skill ; but to ascertain the mode in which it is laboring is not quite so easy. If irritation was always the same in its nature—"if diseases were, in all cases, alterations in *plus*, and never in minus"—in short, if there were no specific diseases, diagnosis would be a much easier study than it is. But reason, as well as experience, shows that there are different kinds of irritation—and it is in the endeavor to maintain its identity in all cases, that the disciples of Broussais have thrown themselves most off their guard. An organ will often exhibit the same symptoms from excess, and from defect of stimulus. Thus, when the retina is over-excited by intense light, indistinct vision is the result. The same takes place when we pass from a very clear light to an obscure one. The voice becomes hoarse when the larynx has been much exerted—and the same thing often occurs if we remain several days without exercising this organ. An instance of this is related by the author, but we imagine it is far from being a general phenomenon. The stomach becomes irritated, painful, and even inflamed, from excesses of the table :—the same phenomena occur when hunger is long sustained. The disease called hemicrania is occasioned by plethora, and also by inanition. The muscular fibres of the stomach, bladder, rectum, &c. contract by the excitation of their contents, or the influence of the nerves distributed to them. They contract also convulsively when they are deprived of their due supply of blood, or when the brain ceases to receive its supply of the vital fluid. Finally, observes our author, the phenomena of syncope and of apoplexy, or cerebral congestion, display an analogy and similitude that, he has no doubt, causes them often to be confounded. The distinction, however, is of vast importance, and M. Piorry proceeds to inquire, if there can be any functional symptoms which can tend to elucidate the diagnosis.

1st. In cerebral congestion, or apoplexy, there is suspension, more or less sudden, of the intellectual functions :—The same in syncope.

2d. In the *former* disease, there is a suspension of function in the organs of sense :—The same occurs in lypothymia. In both cases, we sometimes see spasmodic contractions, sometimes loss of power of the members.

3d. The drawing of the mouth and the partial paralysis have been laid down as pathognomonic signs of effusion on, or some disorganization of the brain ; yet our author has seen these phenomena unequivocally in syncope. The same may be said of convulsive motions in the eyes and muscles of the face — involuntary evacuations — stertorous breathing, &c. The state of the circulation furnishes more certain diagnostic marks. The contractions of the heart, in cerebral congestion, are slow, soft, and easily analyzed. In syncope, they are accelerated, weak, and very irregular. The pulse in general, and especially in the arteries about the head, is full, vibrating, and slow in apoplexy—the reverse in syncope. In the *former*, the face is red—in the *latter*, pallid. But these indications are not always so very clear in the state of the circulation. Cerebral congestions or apoplexies sometimes supervene in individuals, whose circulation is languid and pulse feeble—whose faces and lips are habitually pale. Thus, he observes, the diagnosis between syncope and apoplexy, in many cases, is very difficult ; and yet it is of the greatest importance that these two affections should be accurately distinguished from each other, as they require diametrically opposite treatment. The author is quite sure that the two affections are often confounded—acknowledging that he himself has committed the mistake. Indeed he relates a case of this kind. The diagnostic mark which M.

Piorry relies on is altogether a physical one. It consists in the *position* of the patient. If the phenomena depend on syncope, the horizontal position will ameliorate the symptoms, and vice versâ. If on cerebral congestion, the vertical posture will relieve, while the horizontal will aggravate the symptoms. In the latter case (cerebral congestion) M. Piorry recommends ligatures to be placed on the extremities, to produce a stasis of the blood in those parts. We much doubt the utility of such a procedure. If ligatures prevent the return of venous blood from the limbs, it also prevents any arterial blood being sent to them. The thing, therefore, is as broad as it is long.

II. *On Death from Syncope—Observations on Venesection in general.*

The cessation of the cerebral circulation is, our author thinks, next to asphyxia from the accumulation of bronchial mucus, the most common way in which death takes place. In all great hæmorrhages, there is an abundant secretion of fluid from the surface of the intestinal canal, and also from all the other mucous tissues, which tends further to exhaust the strength and deprive the brain of a due afflux of blood. The heart being ill supplied with nervous energy from the brain, becomes distended, and at length ceases to carry on the circulation. From the circumstance that the brain is encased in bone, the vessels will be found full after death, even from hæmorrhage—and this has led some pathologists astray. Our author has often seen death occasioned by injudicious venesection. In dilatation of the heart at the Hôtel Dieu, he has often seen the fatal effects of bloodletting. The author therefore lays down a set of rules respecting venesection, which he thinks it would be of great use to observe.

1st. When, in a person, we find a dull sound on percussion of the chest—when there is active dilatation of the heart—when the liver is enlarged—the veins distended, the pulse full, and circulation active, we may be sure that the circulation is in excess, and we need not fear to bleed freely. But if the symptoms are the reverse of the above, we should be cautious in the use of the lancet. We should also be cautious, he observes, when the skin is fresh-colored, but where the integral organs give indications the reverse of plethora. In doubtful cases we should never bleed in the horizontal position ; for if syncope then occurs, we have no resource from change of posture.

INTRO-ANIMATE PATHOLOGY.

The Result of Modern Investigations on this Subject.

The following summary and deductions conclude the ingenious work of Dr. Neale on the Linnæan doctrine, some account of which we offered in a previous number.

From a careful review, says he, of all the facts before stated, I think we may be justified in coming to the following deductions.

1. That it is a general law of nature, from which even the human body is not exempted, that death (in most instances) is caused by the agency of parasitical insects and animalcules, which entering, nidifying

in, and preying upon, the bodies of animals, or the leaves, trunks, or cortical matter of vegetables, and corrupting their vitality, in a longer or shorter period, produce this effect—death.

2. That the presence of such parasitical animalcules has been amply proved in diseases of the human body, such as those of the skin,—scabies, guinea worm, leprosy, &c., by learned and competent observers: and in dysentery, phthisis pulmonalis, ophthalmia, and other maladies, by Rolander, Bartholinus, Linnæus, Lowenhoeck, Adams, Sir Joseph Banks, and other physicians, philosophers, and naturalists:—that their existence also is unquestionable in phthiriasis and ulcers, as proved by a great variety of acknowledged facts; and witnessed amongst others, by Sir Edward Wilmot, Drs. Mead, Heberden, Sir George Baker, Dr. Mouffet, and other physicians of equal veracity and authority:—and that their presence has been asserted and all but proved in plague, syphilis, scarlatina, puerperal fever, smallpox, measles, hooping cough, acrodynia, yellow fever, &c., by such men as Athanasius Kircher, Linnæus, Hauptmau Langius, and others of equal note.

3. That living parasitical animals have been found in almost every part of the human body, as in the brain, frontal sinuses, lungs, stomach, liver, intestines, kidneys, bladder, interstices of the muscles, &c.—as appears from the researches of anatomists and naturalists.

4. That substances called vermifuge, or the most speedily destructive of insectile and animalcular life, have been found generally the most valuable and efficient remedies in the cure of a great variety of human diseases; but more especially in plague, syphilis, puerperal fever, scarlatina, acrodynia, yellow fever, cholera epidemica, leprosy, dysentery, smallpox, hooping cough, measles, &c. &c.

5. That, from their extraordinary exemption from the contagion of plague, enjoyed by persons carrying on particular occupations, particularly those whose dresses are always saturated with powdered quick lime, as tanners, whitewashers, limeburners, &c., and also by all manufacturers and porters of olive oil in the Levant and coast of Barbary—and from the great efficacy of warm oily frictions and potions of olive oil; there seems to be little or no doubt that the efficient causes of plague consist in minute insects, whose vitality is incompatible either with oil or quick lime.

6. That as all living animals, clothed with fur or feathers, are universally believed, in oriental countries, to be the intermediate living agents in diffusing pestilence (cats, owls, &c. being invariably shot by the Franks during their times of seclusion), there seems to be much reason for believing that the insects of plague burrow in the skins of these animals, and are thus transported from place to place.

7. That the birds of the air die in large numbers, and have been even known to forsake countries during times of pestilence: and when the last pestilence raged at Gibraltar, parrots, canaries, and other small birds in cages, and even poultry and domestic animals, perished in great numbers. At Marseilles, during the plague of 1720, all the bakers died, probably from the acari or plague insects burrowing in the dry wheat flour of their ovens.

8. That epidemic diseases are generally diffused in three different

ways : namely, either by immediate contact, intermediate contact, or through the agency of certain mists, or exhalations, carried through the atmosphere.

9. That instances of the first mode of diffusion, called contagion, are most frequent in plague, syphilis, leprosy, smallpox, scabies, &c.

10. That the second mode of diffusion, or by intermediate contact, is that whereby these diseases are generally said to be inoculated, as by the puncture of a lancet or needle, or the application of an infected dossil of lint to a moist or abraded surface or the pores of the skin ; but, beyond all, by the agency of winged or creeping insects, which by puncturing the skin, apply the poisonous matter to the open mouths of the absorbent vessels ; and which insects we have denominated "pestiferous."

11. That the third mode of diffusion, or the agency of certain mists or exhalations from the earth, is that employed by DIVINE PROVIDENCE, at the first commencement of all epidemics : by which these are wafted over rivers, mountains, and even seas ; and which exhalations, being admitted into the nostrils and lungs, become thus immediately applied to the sentient extremities of the nerves, paralysing the brain and spinal marrow, and instantly putting a stop to the muscular motion of the heart, and causing asphyxia, followed by death. By this mode, too, a multitude of persons are affected at the same time, and thereafter the disease is diffused as in radii from a centre.

12. That a non-electrical, or negatively electrified state of the atmosphere seems to be a most powerful predisposing cause at least in the human body, to prepare it to take on diseased action, and that, on the contrary, a highly electrified or positively electrified state of the atmosphere, is the most salubrious and conducive to human longevity.

13. That the winds from the *south-east* quarter (at least on this side of the equator), have been observed in all ages to be of a highly deleterious character. That such winds have been found to be instantly fatal if inhaled in the deserts of Lybia and Africa, and are known under the names of Simoom and Kampsin by the Arabs, Moors, and Turks, and in Italy, Malta, and Sicily, by the appellation of Sirocco winds : and that most epidemic diseases come to us from the S. E. quarter, and are brought by these winds, which are generally followed by the rapid fall of the mercury in the tube of the barometer, and are believed to be accompanied by a non-electrical state of the atmosphere.

14. That, on the contrary, the winds coming from the north-west quarter, are (on this side of the equator) of a highly salubrious quality : that they are frequently attended by clouds highly electrified, which, on discharging their positive electricity, and producing thunder storms and torrents of rain, restore the electrical equilibrium and salubrity ; while, at the same time, they destroy insectile and animalcular life, which is always too energetically evolved by S. E. winds.

15. That the efficient causes of pestilence (believed by us to consist in myriads of transparent minute ova or animalcules), are wafted in straight lines over the surface of the globe, (on this side of the equator,) on the bosom of S. E. winds, proceeding in regular daily distances, commensurate to the daily flights of deleterious insects, such as those of the

wheat flies, aphides, locusts, &c., and which we believe might be visible to our eyes, if our powers of vision were sufficiently powerful to perceive such minute objects.

16. That a "state of predisposition" in the living human body, consists in a state of debility however produced : either by great solar heat, breathing impure air, imbibing copiously intoxicating liquors, exposure to night air, or the action of previous diseases or loss of blood, or great negatively electrical variation of the atmosphere in which we live.

17. That the experiments of Count Moscati have proved that albuminous matter, which is the most putrescent of all substances, is generally floating in the air of marshes; and that similar experiments made by Mr. Hermann, in Russia, have proved the existence of a similar substance in the air surrounding the bodies of those who are suffering under epidemic cholera.

18. That all great pestilences have been attended by, but most commonly preceded by, a similar mortality amongst cattle, and the other domestic animals, not even excepting the birds of the air, or the fishes in rivers : and also by diseases called "blights" amongst vegetables.

19. That blights, amongst corn and vegetables, are caused by myriads of small insects and animalcules.

20. That the feeding upon the flesh of diseased animals and blighted vegetable substances, has been ever found a most powerful predisposing cause of pestilence, and that such food has been ever found adequate to produce great mortality, as instanced in dry gangrene and convulsive and gangrenous ergotism, which have finally become epidemic.

21. That a noisome stench has been generally observed to precede or accompany the prevalence of epidemic diseases ; as was remarked lately at Paris, during the disease called acrodynia or "dando" fever, and as has been mentioned in the sacred writings, and by various accurate observers.

22. That great heat, attended by calms, and a non-electrical state of the atmosphere, energetically develope insectile and animalcular life, and contribute to the evolution of mists and exhalations, which then arise copiously from all marshy plains and pools of stagnant water, which, at such periods, are prone to put on the color of blood.

23. That violent electrical convulsions and thunder storms instantly destroy insectile and animalcular existence.

24. That deleterious insects are either finally swept away by strong north winds into the sea, there to perish, or that seasons of great pestilence are followed by violent storms of thunder, lightning, and rain, which destroy the ova or animate causes producing pestilence, and restore salubrity, as is yearly witnessed in Constantinople, Syria, Egypt, and Barbary.

25. That the universal experience of mankind in all ages bears testimony to the prevalence of these facts :—That they are confirmed by the writings of all historians, sacred and profane—and that the inspired writers more especially confirm the truths here inculcated.

26. That insects are always styled in the sacred volume the armies of the MOST HIGH GOD, and the destined ministers to fulfil his will : and that nothing is wanting to make these truths universally acknowledged

but more accurate observations of what is now daily passing upon the surface of this our globe.

27. That all great pestilences have been commonly observed in this our hemisphere to have originated in the regions of the East, and to have been wafted on the bosom of S. E. winds over the other regions of the earth; as has been exemplified in the great pestilence of the 14th century, and more lately during the progress of the epidemic cholera; and that all minor deviations from this course have been only effected by the passing to and fro of multitudes of human beings in ships and caravans, bringing the insects with them—Nay, that even the sweating sickness which broke out in England in the army of Henry VII. on coming from France to Wales, was believed by the historical writers of that age to have been brought from the isle of Rhodes several years previously.—See Dr. Caius de Ephemera Britannica—Lord Verulam's History of Henry VII.—Thuani Histora. Lib. 5.—Lord Herbert's History of Henry VIII.

ATTENDANCE OUGHT NOT TO BE GRATUITOUS.

Heu, mihi! me malus abstulit error—amor pecuniæ.

[We copy the following very sensible letter to the Editor of the London Medical Gazette, as it presents a correct view of a subject on which there exists erroneous impressions in the community, and perhaps among medical men themselves.]

Sir,—

The daily occupation of the medical man is at once the work of public humanity and of personal profit. His task and duty is to do good, to stand by the sick, to cheer the conscious sufferer from vicious indulgence, and to administer solace to the mind, and ease to the body. In the day of battle, the medical man endeavors to save the life which the soldier destroys; and when a national pestilence is abroad, the medical man is chiefly exposed to the pest while watching and learning its nature and treatment. He always performs the work of charity, because he gains his daily bread by being charitable.

A false notion is now afloat concerning the humanity of medical men. While a disease is threatening to infest our capital, public authorities are wisely convened to forestal and prevent its ravages among the dark and dirty dwellings of the poor; and the poorer people are cleansed and cheered according to the active and diligent instructions of their alarmed superiors. A general feeling of humanity is produced and enforced by private apprehensions. Sobriety, one of the first of Christian virtues, is now proclaimed, not by the voice of wisdom, but by the shout of calamity. In the discharge of this novel duty, the medical man is called upon to take his part; but his part is to be discharged, not in anticipating the arrival of the disease, but in meeting it when it is arrived. He is to hold himself in readiness to rise by night and by day, to enter the houses of the poor, to detect, to touch, to handle, and to treat, a loathsome sickness, and to lean over the bed, or to tarry by its side, till safety or death shall have ensued. If there be any contagion or infection, he is exposed to the baneful influence ; if there be any hazard of health, he is open to the obvious danger. We doubt not the moral energy and the professional avidity of any medical practitioner in the encountering of a new disease ; the eagerness with which the philosophic physician would hasten, any hour, to survey, perchance to understand and to cure, a spreading evil fatal to the lives of men ; but no man is justified in wantonly exposing his person to mischief ; and every master of a family is bound to consider those who depend upon him for support. The danger may be adventured upon, but only with the prospect of a fair remuneration ; and those authorities which require the medical man to serve for nothing, dictate an act of humanity to be practised only according to the feelings and the means of the individual dictated to. A medical man's time and judgment are purchaseable articles ; and they are, like bread and wine, to be purchased in all seasons, both of prosperity and of national adversity ; since humanity is exhibited, not by acting for nothing, but in doing to the utmost what is right and proper, in the hope of a legitimate reward. They who do less than this, are inimical to themselves and to the common weal ; for how shall society be held together, if mutual advantages be not considered ? The medical man must support himself by his labor, and he will soon cease to be able to act gratuitously if his labor do not supply him with the means to live.

But suppose there be no danger of infection, and that the disease were curable by a touch, nevertheless that touch, and that exertion, without hazard, is still worthy of a just reward. So that, if the poor are to be attended gratuitously, let the medical man act for himself, as he frequently does act, without ostentation, by giving, if he choose, his advice and his medicine as a free gift, merely with the hope of doing good.

These observations are presented to your notice, because some parishes have called upon medical men, and some medical men have voluntarily offered themselves, to act upon a principle of bald humanity—a humanity which is to be exercised according to the authority of a vestry. And it appears to me (perhaps I am sordid) that in exact proportion as we are called upon to do more, so are we worthy of a higher pay ; and that when our rest and our health are to be exposed and broken, we are not justified in promising our services without the certainty of an appropriate remuneration. Money we desire for ourselves indeed, but more for those who live by our exertions. Money is the source of subsistence. The days are gone when we might pluck, and live with ease and pleasure, from the tree of life ; and in England a man will be arrested for nudity, if he have not money to clothe himself withal. The profit to be expected from an extension of name and reputation, is remote and vacuous ; and that policy is truly fallacious which places the well-being of an individual or a nation not in immediate, but in a prospective good ; since who can foresee or control the adverse rise of intermediate circumstances ?

Having advanced the principle upon which I, as a man, expect the just remuneration of my services, I am not ashamed to say with Horace—"*quærenda pecunia primum est.*" I would not let my ear be deaf, nor my eye blind to the sight and the sound of genuine poverty ; nor would I spare my best exertions to alleviate the afflictions of the unfortunate, the wretched, and the debased; the knot of my purse can be loosed to give as well as to receive; and I should blush indeed if my hand were not sometimes open to bestow as well as to accept. I have learned, from the practice of my profession, the pleasure of doing good; and I only demand for my exertions, especially public exertions, those pecuniary supplies which may still enable me to practise and to study medicine, to support my family, to benefit my friends, and to give to all those who in the hour of need I know will be relieved and comforted by the silent gift of benevolence. MEDICULUS.

November 25, 1831.

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BOSTON, MARCH 14, 1832.

RYAN'S MEDICAL JURISPRUDENCE.

THE great number of volumes that have been written on legal medicine, and the different views they present of the principles of this science, may be ranked among the causes of the indefiniteness of the ideas on this subject, of a great majority of the Profession in this country. Few probably are aware of the intricacy of this science, or how wholly incompetent is a common medical education, to enable a man to be a good jurist or to do himself credit when called on for professional evidence in a court of law, unless much time have been expressly devoted to this important branch. Legal medicine forms part of the study of the Law, and, if it be omitted in that of Physic, the practitioner is little to be envied to whose lot it falls to be questioned under oath by an intelligent and shrewd attorney, on such points as the Physician is usually expected to elucidate in criminal prosecutions. As our country grows older, crimes of all kinds will become more common, and medical evidence will be in more frequent requisition. Even at the present day, there are few men who have been long in practice, who have not been compelled, however reluctantly, to decide, by their evidence, the fate of some accused person; and still more important is it for those who are now students, to make themselves familiar with the intricate machinery of forensic medicine. To such we would recommend an attentive perusal of the "Manual" of Dr. Ryan, which has been republished by Carey & Hart, of Philadelphia, with such alterations as the peculiarities of our laws have rendered necessary. This Manual embraces the whole ground, appears to be compiled with great care from the best authorities, and the language is so plain and explicit as to render it clearly intelligible to the legal as well as medical student. Into the hands of the former, it will unquestionably find its way; to the latter, the principles unfolded in it should not be unknown.

HISTORY OF THE CHOLERA.

A Medical and Topographical History of the Cholera Morbus, including the Mode of Prevention and Treatment. By M. Scouttetten, Adjunct Professor of the School of Medicine at Strasburg, &c. &c. *With a Report read at the Royal Academy of Medicine, at Paris, Sept.* 17, 1831. Translated from the French by A. Sidney Doane, A.M., M.D.

The above is the title of a small volume just published by Carter & Hendee, in their usual style of neatness. The subject is one of exceeding interest to every member of the profession and the community. In Europe the various productions which have been issued from the press, with the design of enlightening the faculty in treating, or the public in avoiding, this fatal malady, are almost without number. In the last Monthly we have received from London there are no less than *eight* distinct works on this subject noticed or reviewed, and in the January No. of the Medico-Chirurgical we find reviewed seven elaborate works on Cholera, viz. those of Dr. Kennedy, Dr. Adam Neale, Mr. Bell, Mr. Orton, Mr. Searle, Dr. Lefevre, and Dr. Young. In addition to these are many miscellaneous works, pamphlets, and lighter productions, as reports, statements, papers, &c. &c. on the same subject, the *Notices* of which occupy about one hundred pages of the last mentioned periodical.

No very great uniformity can be expected in the representations or speculations of these documents which are flowing in upon us so rapidly. The perusal of them rather confuses than directs the mind. It is therefore an act of true benevolence in the Physician who has digested the various accounts that have been published, and presented us, within a small compass, most that is important to be known respecting the history, the symptoms, the modes of preventing, and the present modes of treating the disease.

Dr. Doane, of New York, to whom we are indebted for this translation, has left out the details of the *Report to the French Academy*, and presented only the general summary with which that report concludes, and thus has he diminished the bulk, without lessening, for reasons above stated, the value of his work.

For the purpose of illustrating the progress of the epidemic, a map is appended to this treatise, on which its advances from country to country are marked out.

This we believe is the first work published in this country on the subject of Cholera, and it is confidently recommended to those Physicians who are desirous of obtaining a view of the whole ground without spending half their income, and a still larger proportion of their time.

In noticing and recommending this work, we should except from the general approbation already expressed, the author's few pages on contagion. On this subject he is peculiarly unfortunate. He declares himself a non-contagionist. He is such in his own interpretation of this term ; but in the sense in which it is commonly taken he is a stout contagionist, and ought so to be ranked in arraying one side against the other. He says the cholera has been generally introduced into a place by infected vessels or caravans, and yet denies the contagiousness of the disease. One man who is laboring under it may give it to his attendant, and yet it is not contagious. And so on. The way in which Dr. S. makes out his case may be seen by the following extract, from page 44, with which we close the present notice.

> " A man in health remains an unlimited time in a focus of infection ; he leaves it, continues well, and goes to live among others who have not been exposed to the miasmata of cholera. Can this man communicate the disease ? In other words, can a healthy man carry with him enough of the miasmata to communicate the disease ? Observation answers in the negative. * * *
>
> " But if this man, whom we supposed to have quitted the focus of infection, left it when the disease was almost appearing in him, and if he in fact become sick, the miasmata exhaled will then form a new focus of infection which *can* communicate the disease. The following is an instance. An European left Madras, where the cholera existed, in October, 1818 : he fell sick on the journey, and died at St. Thomas-du-Mont, where the disease had not as yet appeared. The next day his wife died; two days afterward the landlord perished, and at the end of two days more, the landlady also was attacked with the cholera, as well as the domestics who waited upon them. This fact is one of the most remarkable which has been mentioned by the contagionists in favor of their theory, *but it proves against them.* To demonstrate the existence of contagion, the man must have communicated the cholera to others, without being affected by it himself, as every day Physicians carry vaccine virus, &c. without taking the disease. Thus we repeat it, a healthy man coming from the focus of infection, does not carry with him *enough* of the miasmata to reproduce the disease. This transmission does not occur except by the formation of a new focus "!

MEANS OF RENDERING GIBRALTAR HEALTHY.

Dr. Neale supposes the chief cause of the fever which has been so often and so fatally epidemic at Gibraltar, to be its close proximity to a lofty mountain which completely prevents its being perflated by winds from the north-east. He proposes, therefore, that the British Government should make a tunnel completely through the rock of Gibraltar, in the direction of north-east and south-west, for the purpose of admitting the cool breezes in the heats of summer, and thus affording a proper ventilation. The length of this tunnel would be about three quarters of a mile.

It is well known that the calcareous rock of Gibraltar abounds with large natural cavities, and he supposes it probable that some of these would be laid open in the course of the operation, and that some spring or lake of fresh water might be discovered there, which would add greatly to the healthful result of the work. In default of such discovery, or even in any circumstances, he suggests that a large cavity should be excavated in the side of this tunnel, for an ice house, on the plan of those which exist in the town of La Valetta, in Malta. The whole expense of these works is estimated at about £50,000. If to this sum we add £150,000, we should come nearer than Dr. N. to the true cost of such an undertaking. Even at such an expense, however, the object would not be dear bought, if it were attained; and that it would be in a great measure, there is certainly a high degree of probability.

PURE WATER.

The universality with which all we eat and drink, is imbued with the water of the city, renders it of vast importance that a supply should be provided of that which is pure and wholesome. On the accession of our present excellent mayor, we were gratified to find this subject mentioned among those to which the attention of the city government was directed, and it was hoped, that ere this, some active measures would be taken towards the accomplishment of so desirable an object. The perfect success of the experiment which has been made at Philadelphia, leaves it no longer problematical whether the finances of this city would justify any extensive movements in this matter. No doubt can remain on the mind of any one who has given the slightest attention to the subject, that the proposed plan would not only be a source of health and comfort to our citizens, but also of actual revenue to the city. These lines, we have indited merely for the purpose of calling the subject up to the notice of those with whom its pursuit now rests, and we trust they will not be inactive in a work, on the expediency of which all the doctors are agreed.

Massachusetts Anatomy Bill.—This bill, with the report of Mr. Davis to the Massachusetts Legislature, are favorably noticed in the last London Medico-Chirurgical Review. After giving a copy of the act as it passed both Houses, the Editor of that Review offers some remarks upon it, from which we extract the following.

> "It will be obvious" says he, "to our readers, that the foregoing Act embodies in its provisions most of what has been desired in this country. So far as we can see, it leaves untouched the penal statute, which makes dissection part of the punishment for murder and other great crimes. Probably, this may be the object of a separate enactment. The Act of the Massachusetts Assembly appears to be straightforward and simple, and calculated to answer the ends proposed. It has infinitely the advantage over the legislative bantling which, we had almost said fortunately, miscarried in this country. The American law leaves no field for trickery; does not open a job here and erect corners for abuse there; does not constitute boards, and licences, and committees; in fact it is not stained by that leaven of the patronage system, which seems to infect every action of every institution in this happy land. The American law simply provides bodies for dissection, and gives them first to the medical schools—to regularly-educated medical men when the schools have been supplied.
>
> In conclusion, we beg to press one consideration on our medical brethren in town and country. At the present moment, foreigners are excelling us in the cultivation of our science, and there can be little question that this is

owing to their superior facilities for the acquisition of anatomical knowledge. In America, where obstructions were thrown, as here, in the way of the profession, those obstructions are vanishing before the energetic appeals of that profession to a wise legislature. Let us imitate their example, and we shall equal their success. * * * Liberal institutions are rising around us; the lion of freedom has roused himself, and its enemies are looking aghast. It is with science as it is with the political institutions of nations; she is withered and cramped by the trammels of oligarchies and of despotisms. Let her be free, say we, as the air we breathe, for the more she is released from her bondage, the more bold will be her gait, the more bright will be her hue."

Professor Pattison.—We seem to have obtained some credit abroad for the invitations extended to the Ex-Professor Pattison. The English and Scotch Journals hold the same language on this subject, as a sample of which, we present the following extract.

"We are extremely gratified in learning that our transatlantic brethren have healed the wounds inflicted on Mr. Pattison by his countrymen, by offering him professorships in two different Universities in the United States. This circumstance speaks volumes as to the talents of Mr. Pattison; but it speaks more than volumes as to the generosity—the almost CHIVALROUS HONOR and FEELING of the American Medical Profession! In this world, and sorry are we to say, in this country, an *unfortunate* man, whatever be his merits, too often receives a blow from every friend, in order to sink him lower in the sea of misfortune! May glory, fame, and prosperity forever attend that country, whose HONESTY is not yet engulphed in that sink of mercenary selfishness and corruption which entombed the honor and power of Asia, Egypt, Greece, and Rome—would that we could except modern Europe! N. B. The London University has acknowledged its injustice, by making Mr. Pattison a pecuniary recompence for his wrongs!!"

Analysis of the Blood in Cholera.—Dr. O'Shaughnessey went to Sunderland, as we stated a few weeks ago, to make some experiments on the blood of cholera patients. The results he has obtained are briefly the following:

"1. The blood drawn in the worst cases of *the* cholera, is unchanged in its anatomical or globular structure.

2. It has lost *a large proportion of its water*, 1,000 parts of cholera serum having but the average of 850 parts of water.

3. *It has lost also a great proportion of its* NEUTRAL *saline ingredients.*

4. *Of the free alkali contained in healthy serum, not a particle is present in some cholera cases, and barely a trace in others.*

5. Urea exists in the cases where suppression of urine has been a marked symptom.

6. *All the salts deficient in the blood, especially the alkali or carbonate of soda, are present in large quantities in the peculiar white dejected matters.*"

Nitric Acid in Toothache, by Dr. RYAN.—By referring to page 251, Vol. V. of this Journal, an account will be seen of Dr. Ryan's remedy for toothache. In the last London Medical and Surgical Journal, we have the following note from him.

"Since my former note upon the extraordinary success of this acid, in giving immediate relief, when properly and cautiously applied to caries of the teeth, I have used it in many cases with invariable success. It should be applied with a gold or glass probe covered with lint, as a silver probe decomposes the acid, and renders it ineffectual. It is therefore necessary to cover the ordinary probes with lint very lightly, and to apply the acid quickly to every part of the carious surface. If the disease ascends high into the fang by a fine opening, complete relief cannot be obtained, unless the extremity of the nerve is touched, and this is a difficulty which is often met with, when the upper teeth are affected. In general, the application affords immediate relief without the slightest pain."

Preparation of Hydriodate of Potash.—Dr. William Gregory recommends the following process for the preparation of that salt. The iodine is to be dissolved with the aid of heat in a solution of pure potash. Enough potash must be added to form a solution having a pretty strong yellow color, and if too much has been used so as to destroy the color, iodine must be added till the color is restored. The solution is then evaporated to dryness. The dry mass, consisting of iodate of potash and iodide of potassium, is now to be exposed to a gradually increasing heat, till it acquires a pretty full red heat, in a covered crucible of platinum or silver. The salt melts, and the iodate of potash undergoes a decomposition exactly analogous to that which takes place in the chlorate of potash when exposed to a red heat. The whole of the oxygen, both of the acid and the potash, is expelled, and iodide of potassium remains; so that the whole of the iodine is now in the form of iodide of potassium, or hydriodate of potash. The heat must be continued at the same degree for about half an hour. When cold, the melted mass is softened out of the crucible with hot water, and dissolved in a moderate quantity of that liquid. If necessary, it is filtered, and the filtered solution is then evaporated to dryness by a gentle heat, when a snow-white crystalline salt is obtained. To ascertain whether the decomposition of the iodate has been complete, a small quantity of the salt is tested in a tube with alcohol, which ought to dissolve it entirely with the aid of heat. If any remains undissolved, and if the undissolved portion dissolves in water, and causes a white precipitate with acetate of lead, it is a proof that some undecomposed iodate is still present, and the salt must be again heated to redness till it stands the above test. A little practice renders it quite easy to know the proper degree of heat, and how long it should be continued.

The salt thus obtained is white and crystalline, deliquescing slightly in the air. It is easily soluble both in water and alcohol, especially if heat be applied. Its solution gives with a solution of corrosive sublimate a precipitate which at first is pink, but speedily changes to a bright scarlet. With acetate of lead it gives a bright yellow precipitate of iodide of lead, which is chrystalline if the solution be slightly acid and very dilute.

Overdose of Quassia.—Some years since, a patient with worms (ascarides) having been admitted into a certain hospital in London, he "was prescribed for by a certain physician, then a young man.—He probably having remarked the certainty with which the London pastry cooks and confectioners are in the habit of administering a little infusion of quassia to certain swarms of most unprofitable customers (the domestic flies in their shop windows), bethought himself of giving a similar treat to the ascarides in his patient's bowels. He, therefore, boldly prescribed a powerful decoction of that wood to be thrown up the rectum, *more solito.* Next morning on the young physician's walking through the ward and arriving at the space then vacant, which had been on the foregoing day occupied by his luckless patient's bed, he turned sharply round to the nurse and inquired what had become of Thomas.—'Oh faith!' says the honest Hibernian, 'sure enough he's gone, sir.' 'Gone,' said the doctor, 'where?' 'Bless your soul, sir, where should he be gone, but to the dead house.' And so it was, sure enough, for the strong decoction of quassia proved so effectual a poison, that it not only killed the worms themselves, but the poor man that owned them."

The Nature of Animal Decomposition.—With a view to ascertain the nature of those changes which all animal and vegetable substances undergo, the following experiments have been made.

A piece of muscular flesh was cut from the leg of a calf about half an hour after it had been slaughtered, and inclosed within a glass tube, which was hermetically sealed by means of a lamp and blow-pipe. It was then exposed to the rays of the sun in a southern window during three days of summer. On the third day the whole of the internal surface of the tube was found to be covered with a bluish coating, resembling the blue covering of a plum, and was distinctly observed to be perfectly alive, consisting of minute animalcules, whose motions were perceptible even to the naked eye, but still more on the application of a magnifying lens. The same experiment was repeated with beef, mutton, lamb, pork, and fish, with the same results: excepting, that of all flesh, pork became the soonest animated; and of all the fishes observed, that of the mackerel was the soonest corrupted.

The above facts seem to favor the doctrine of animate pathology, for it is well known to every physician that pork and mackerel, when kept too long before being taken into the stomach, are more frequent causes of disease than any other species of animal food.

The Passage of a Simoom.—Bruce thus describes the approach of a simoom which he witnessed in crossing the desert of Nubia. "At eleven o'clock, while we contemplated with great pleasure the rugged top of Chiggre, to which we were fast approaching, Idris cried out with a loud voice, 'fall upon your faces, for here is the simoom.' I saw from the south-east a haze come, in color like the purple part of the rainbow, but not so compressed or thick. It did not occupy twenty yards in breadth, and was about twelve feet high from the ground. It was a kind of blush upon the air, and it moved very rapidly, for I scarce could turn to fall upon the ground with my head to the northward, when I felt the heat of its current plainly upon my face. We all lay flat upon the ground as if dead, till Idris told us it was blown over. The meteor or purple haze which I saw, was indeed passed, but the light air that still blew was of heat to threaten suffocation. For my part I found distinctly in my breast that I had imbibed a part of it, nor was I free of an asthmatic sensation till I had been some months in Italy at the baths of Poretta, near two years afterwards."

Puerperal Fever Epidemic.—We have well-authenticated records of the puerperal fever having been epidemic in Europe eleven times in the last two centuries; viz. in 1662, at Leipsic; in 1662, at Copenhagen; in 1723, at Frankfort; in 1746, at Paris; in 1767, in Normandy; in 1770, in the Hospital of St. Marks at Vienna; in 1771, in the lying-in Hospital of Westminster; again in Vienna, in the years 1776 and 1780; again in Paris, in 1782, in the Hotel Dieu; in 1786, at Arzago in Lombardy; once more in London, in 1787, and in Somersetshire, in 1811.

Monthly Notice of New Publications.

Under the above head, we propose, once a month, to offer some brief account of such works on subjects connected with the medical and other sciences, as may be *published*, *republished*, or *received* in this country. In order that the earliest information of such books may be given to our readers, we request publishers who may forward works to be noticed in this department of the Journal, to send them as soon as convenient after they issue from the press.

☞ All communications to the Editor should be left at his house, or at the office of Clapp & Hull, No. 184 Washington Street.

Whole number of deaths in Boston for the week ending March 9, 38. Males, 18—Females, 20.

Of brain fever, 1—lung fever, 6—stoppage in the bowels, 1—dropsy on the brain, 1—infantile, 2—influenza, 2—inflammation in the bowels, 1—old age, 3—throat distemper, 1—consumption, 4—apoplexy, 1—intemperance, 2—inflammation on the lungs, 1—scarlet fever, 6—croup, 1—jaundice, 1—smallpox, 1—tumor, 1—unknown, 2.

ADVERTISEMENTS.

HISTORY OF THE CHOLERA MORBUS.

Just published by CARTER & HENDEE, a Medical and Topographical History of the Cholera Morbus, including the mode of Prevention and Treatment, by Scouttetten, adjunct Professor at the School of Medicine at Strasburg, member of the Royal Academy at Metz, &c. &c., with a Report read at the Royal Academy of Medicine at Paris, Sept. 17, 1831. Translated from the French, by A. Sidney Doane, A.M., M.D. m14

REPORT OF THE ROYAL ACADEMY OF MEDICINE to the Minister of the Interior, upon the Cholera Morbus, published by order of the French Government. Translated from the French by John W. Sterling, M.D. Just received by CARTER & HENDEE. March 14.

A Treatise on the Structure, Functions, and Diseases of the Human Sympathetic Nerve. Illustrated with Plates. By John Fred. Solstein. Translated from the Latin, with Notes, by Joseph Pancoast, M.D. Just received by CARTER & HENDEE. March 14.

A DICTIONARY OF MEDICINE, designed for popular use. By Alexander Macaulay, M.D. Second English edition. Just received by CARTER & HENDEE. March 14.

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THE

BOSTON MEDICAL AND SURGICAL

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IRITIS.

On the Use of the Oil of Turpentine in Iritis. By JOHN FOOTE, Esq.

INFLAMMATION of the iris may exist independent of, and totally unconnected with, inflammation in any other membrane of the eye, such as sclerotitis or corneitis ; such is the opinion of Mr. Mackenzie, of Glasgow : yet it is more frequently accompanied with one or more of these inflammations. Many medical men have seen cases of iritis with corneitis, sclerotitis, or inflammation of the conjunctiva, that have never seen a case of simple iritis, or one unattended with any other inflammation. From what I have seen of it, its more frequent accompaniment is the inflammation of the conjunctiva ; and, from this disease being occasionally severe, the iritis is sometimes overlooked, more especially if the attack be slight. When the inflammation runs very high, it is liable to extend to the choroid coat and retina : this fact has induced some writers to deny that iritis can occur without extending to the retina ; but it is a mistake : *simple iritis* may take place. The disease commences most frequently on the pupillary margin of the iris, and extends thence through the whole of the tunic ; and so rapid is its progress in the adhesive process, that we sometimes see effusion taking place on the pupillary margin, and the lymph even becoming organized, ere the rest of the iris is much engaged in the disease. It is from the extreme rapidity with which the adhesive process proceeds that iritis is so dangerous, and requires such energetic measures.

Semeiology. The disease is characterized by certain symptoms in all its forms. We have a beautiful zone of pink hair-like vessels running towards the cornea, forming an appearance like the rays of the sun, as represented radiating from that body. A change of color of the iris is also remarkably evident, owing to its increased vascularity : if blue, it becomes greenish ; if dark-colored, reddish. Contraction, irregularity, and immobility of the pupil, speedily follow, unless prevented by proper treatment. Effusion of coagulable lymph into the pupil and posterior chamber, rarely into the anterior ; adhesions of the iris ; dimness of sight, and sometimes almost total blindness ; pain in the eye, and nocturnal circumorbital pain.

This classification of symptoms is according to Mackenzie, in his splendid work on the Eye : all, or the greater part, exist in every case of iritis. The change of color of the iris, the zonular appearance, irregularity of the pupil, together with the pain, are the most frequent symptoms, and are those also which best indicate the nature of the complaint.

Iritis is frequently divided into idiopathic, traumatic, sympathetic, syphilitic, rheumatic, and arthritic : besides these, there are various compound cases, as when the rheumatic and arthritic are combined, or the rheumatico-syphilitic, or else the arthritico-syphilitic. These distinctions depend more on the causes than on the semeiology or treatment of the disease : thus, the idiopathic arises from cold, or some unknown cause ; the traumatic, from wounds ; the sympathetic, when it supervenes on some other long-continued or very severe inflammation, as on sclerotitis, &c. : these are evident. The rheumatico or the arthritico-syphilitic depends on syphilitic iritis appearing in persons with a rheumatic or arthritic taint in their constitution ; and these cases will generally require the addition of colchicum to the means we employ to effect a cure.

General Treatment. In strong and plethoric subjects, and more especially in the traumatic, syphilitic, and occasionally the sympathetic, the patient should be bled freely from the arm, *pro ut ferant vires :* this will remove the pain for a time, or at least diminish it very considerably. If the pain return violently, the bleeding must be repeated : but it will generally be found sufficient in that case to bleed locally by cupping, in preference to leeches. The generality of cuppers open the temporal artery in cupping on the temples, and we thus obtain what we wanted, and which we could not get by leeches, a rapid loss of blood from the part : the cupper should be always desired to open the artery, or a branch of it. Next to bloodletting, or rather equal, and by some considered superior to it, ranks mercury : this is frequently administered alone, without any other remedial agent, and has certainly, under such circumstances, cured the disease, of which I have seen several instances.

The best form for giving this medicine is a combination of calomel and opium : two grains of calomel and a quarter of a grain of opium, (the dose of the latter increased, if purging come on,) given every second, third, or fourth hour, according to the urgency of the case, so as to salivate rapidly. When the disease continues advancing, and it is not easy to produce that effect of mercury by which it manifests its action, inunction on the temple, either of the ung. hydrarg. alone or combined with belladonna, may be had recourse to with benefit. The power of mercury over this disease is so very great that it has been considered a specific ; and yet, such is the strange anomaly of medical facts, it is supposed that mercury can produce the disease. I have never seen an instance which I could fairly attribute to mercury ; and numerous instances are recorded in which iritis appeared, although no mercury had been given.

In the rheumatic and arthritic, and also in the syphilitic, when combined with these diatheses, it will be necessary to adjoin colchicum, or some of its preparations, with the mercury : in such a case, if calomel be given, it should be administered in conjunction with the extract of colchicum and opium ; but the better way of giving mercury is by inunction, and the internal use of the Vinum Colchici. Such subjects do not bear bleeding well, and it is apt sometimes, more especially in bad constitutions, to prove injurious, by inducing a chronic form, which is difficult to cure, and frequently ends in the worst form of amaurosis. In some persons, owing to idiosyncrasy, mercury cannot be administered, from the distressing effects it produces. Again, when patients have undergone lately, one, two, or more courses of mercury, they are unwilling, and sometimes unable, to bear another course of this powerful remedy : in such cases, turpentine should be had recourse to. This remedy was introduced by Hugh Carmichael, Esq., of Dublin : I quote his words on this occasion, from his Observations on the Efficacy of Turpentine in the Venereal and other deep-seated inflammations of the Eye, published in 1829. " I use the turpentine in this complaint in drachm doses, given three times a day : its disagreeable flavor and nauseating effects I have found best obviated by almond emulsion. This circumstance it is very necessary to attend to, the medicine being so unpleasant that, if its taste be not in some way disguised, it is difficult to depend on patients taking it with the necessary regularity. In the formation of the emulsion, if double the quantity of confection directed in the London Pharmacopœia be employed, (that is, two ounces to the half-pint of water,) it answers the above objects much better : the residuum may be removed by straining.

" With an emulsion so made, the following is the formula I now generally adopt : R. Olei terebinthinæ rectificati, ℥j. ; vitellum unius ovi ; tere simul, et adde gradatim emulsionis Amygdalarum, ℥iv. ; Syrupi Corticis Aurantii ℥ij. ; spiritus lavandulæ compositi, ʒiv. ; olei cinnamomi, guttas tres vel quatuor. Misce, sumat cochl. larga duo ter de die.

" In a few cases it has been necessary to increase the quantity of turpentine to an ounce and a half or two ounces in the above mixture, the other ingredients being proportionally diminished, so that a drachm and a half or two drachms of it may be taken each time ; but in general, when administered to the extent directed in this formula, it has very seldom indeed failed, though extensively tried, and in very urgent cases : the instances of its failure shall be presently noticed. The strangury, so frequently induced by the internal use of the turpentine, is obviated by the usual means, flaxseed (the linseed of England) tea, and camphor julep : when very urgent, the medicine may be suspended for a time. The tendency to acidity in the stomach, which it sometimes causes, is relieved by the addition of carbonate of soda to the mixture : ten or fifteen grains to the eight ounces will be sufficient. Some patients have said the taste was further disguised by this addition.

" When the local inflammation is high, and acute pain is present in the eye and side of the head, the abstraction of blood from the temple by cupping, or the more immediate seat of the disease by leeching, may be resorted to : the same practice is adopted when mercury is used. Nevertheless, I have frequently, when these symptoms were very urgent, relied solely on the turpentine mixture, and with the most decided and expeditious relief : indeed, in some instances, where the pain and hemicranium existed as acutely as they are perhaps at any time to be met with, patients have declared they were considerably relieved after they had taken it once or twice, and that its subsequent exacerbations were lessened in a remarkable degree. It is in the former cases I have generally found it necessary to follow up the bleeding by increasing the quantity of the turpentine.

"It is highly necessary to observe, that the condition of the bowels will require attention : the beneficial effects of the medicine appear to be, in certain cases, suspended when constipation is present, and are called forth, as it were, when this is removed."

These are the words of Mr. Hugh Carmichael, and they emanate from a man of great practical experience : they give a clear and concise view of the cases in which turpentine should be employed, of the manner in which it should be administered, and the precautions to be taken in employing it.

It was from the acknowledged influence of turpentine in peritonitis, and the analogy in point of morbid effects between inflammation of the peritoneum and that of the iris—in both cases a serous membrane being engaged, and in both adhesions being produced between surfaces intended to be free—that Mr. Carmichael was led to make use of it in iritis : he deems that it acts in the same manner that mercury does, by exciting the absorbents.

Mr. Guthrie, who has given it an ample trial, finds that "in some cases it has succeeded admirably ; in others, it has been of little service ; and in some, unequal to the cure of the complaint." Mr. Lawrence has not yet tried this remedy.

From several cases which I have seen, I am inclined to think that turpentine acts by exciting inflammation in the intestinal canal, and more especially the urinary apparatus : the cases which have been most successful, of those which I have seen at least, have been those in which severe strangury has been excited. The degree of counter-irritation thus set up will readily account for the removal of the original disease. I have likewise seen cases in which I found it impossible to excite this irritation, (notwithstanding the violet odor was so powerful that it was complained of throughout the house in which the patient resided, and he was obliged to quit his lodgings accordingly,) and in these no benefit was experienced from its use. I have already said, that it was from the acknowledged influence of turpentine in peritonitis, and the analogy in point of morbid effects between inflammation of the peritoneum and iris, that Mr. Carmichael was induced to try the turpentine : now, as he has taken the example of the use of turpentine in peritonitis to fortify his opinions, I hope I may be allowed the same privilege, of which I shall instantly avail myself, and proceed to ask in what way turpentine acts in curing that inflammation ? If we consult the best works on that subject, we shall find it attributed to the irritation produced along the whole alimentary canal, not the intestinal tube only, as it produces nausea, and frequently vomiting : when we consider the immense extent of surface exposed to the action of this medicine in that canal, and recollect the degree of irritation produced by a common spurge in that canal, we shall have no difficulty in subscribing to this doctrine ; and then reasoning by analogy, if it acts thus in peritonitis, it surely may do so in iritis.

I am also inclined to deny altogether the specific powers of mercury in this or any other disease. If I am right in what I conceive a specific to be, it is a remedy which never fails to cure a disease, and which said disease can never be cured by any other remedy ; its action must also be unknown. Now, for a long period of years, this remedy has been deemed a specific in the cure of venereal diseases, as most of you know ; but it appears that that disease can be cured, and permanently cured, without one grain of mercury, as shown by the records of our army surgeons ; and, again, certain cases have been exasperated, but more particularly certain symptoms, as the phagedenic ulcer, have been rendered worse, by the employment of mercury : and in this disease (iritis), I set out with saying that there are many cases in which it would be improper ; there are many cases, likewise, in which it has failed : besides, this remedy has been employed, and with success, in many other besides syphilitic diseases, as simple iritis, peritonitis, hepatitis, &c. Having, therefore, as I think, destroyed, in some degree, its pretensions as a specific remedy, I will proceed to state that I think this medicine acts in the same manner, as almost all, if not all, our other medicines do, namely, by exciting counter-irritation. We are told that mercury shows that it is exerting its beneficial effect on the system when it has produced sore mouth, &c., and that, until this occurs, we need not expect lasting benefit from it : this is said to be showing its *specific effect* ; but, with all due submission to the holders of this doctrine, may not mercury cure the disease by the *counter-irritation* it produces in the mouth, the salivary and biliary glands ?—*London Medical Gazette.*

SARCOMATOUS TUMOR.

History of a Case of Sarcomatous Tumor of the Mamma—its Extirpation, &c. By N. Hitt, M.D., of Vincennes, Indiana.

Vincennes, (Indiana,) November 10, 1831.

The subject of this history is a Mrs. Holmes of this place, aged twenty-four years. The previous history she gave me of her affliction is as follows.

About twelve years ago, when her system commenced its expansion, she discovered her left breast gradually to increase in size, and to continue to grow after the system had received its ultimate development, giving her no pain and consequently no uneasiness or alarm, until after she was united in marriage to her present husband. During pregnancy, she thought it increased more rapidly ; and after she was delivered of her first born, its increase became more evident and alarming. A few days after the birth of the child, the gland had every appearance, as she thought, of having secreted milk, and was so much distended that medical advice was thought necessary and was obtained. The child was denied access to the enlarged breast, and stimulating applications prescribed with the view to suspend the secreting process.

About this time she thinks a redness appeared, circumscribed to about the size of a half crown, one inch to the right of the nipple ; which redness or inflammation soon gave place to suppuration, and discharge of a fluid, the color and consistence of which she does not now recollect. After discharging a few days, it entirely healed, and no perceptible change was discovered until the second accouchement. Between her first and second pregnancy, her medical attendant, she states, was as assiduous as unsuccessful in his endeavors to discuss the tumor, by the exhibition of medicine internally and externally, until ptyalism was produced and continued for some time.

On Christmas last, she was delivered of her second and last child, when the tumor again resumed its progressive march, and by its accelerated action and unyielding disposition, produced in the mind of the patient the most awful apprehensions.

The following April I first saw her, having been called to relieve her of an attack of fever, at which time the tumor was shown to me as a curiosity. And, what will be thought surprising in a subsequent part of this history, the child was then applied to the enormous breast, which, from its magnitude, looked very unlike the mamma. I then had ocular demonstration of the fact, that secretion of milk was performed, and the child's healthful aspect itself proved it to be amply supplied with the pabulum of life. The tumor at this time was not particularly examined, as it was not requested.

I did not see the patient again until the first of July following. She was then much alarmed in consequence of a circumscribed redness, the size of a crown, appearing about four inches below the nipple, and which having subsided, left to the feel of the finger evident fluctuation. The external appearance of the tumor was smooth, uniform, and elastic, possessing but little sensibility and slight soreness on pressure. Upon pressing the sides of the tumor with the fingers, the internal structure imparted an uneven and irregular feeling. Its largest circumference measured thirty-two inches, and its base twenty-two; its supposed weight from fifteen to twenty pounds. It was supported by a bandage from the neck, assisted by the left arm and hand, which were constantly applied beneath it. None of the neighboring glands were implicated.

Considering the circumstances of the case, the age and comparatively good constitution of the patient, I gave an opinion that extirpation was not only advisable, but would be the only possible means of her salvation from an untimely grave. She did not fully determine to submit to an operation until the above opinion was corroborated by the opinion of several gentlemen now present, who did me the kindness to examine the tumor.

Her mind being fully made up, the 20th July was appointed for the operation. From an unyielding desire to undergo the painful ordeal among her nearest kindred, from which she could not be dissuaded, she was conveyed in a carriage twenty-two miles north of this place a few days previous.

Every preparation being made, my friend Dr. Somes and myself set off on the 19th, and on our way met an acquaintance just from the patient, who stated that nature had anticipated us and had performed the operation by the tumor's bursting and discharging.

We went on, however, and found the tumor collapsed, and still discharging gradually a fluid, the color and consistence of which resembled thick rich cream; and, judging from the vessels containing the fluid, and also the condition of her cloths, there must have been at least one gallon discharged.

The fluid had a pulpy feel, and peculiar smell, not offensive, however. The probe could be plied in several directions, and in some it was not of sufficient length to determine its boundaries. The minds of the patient and her friends were much relieved, supposing the late occurrence would supersede the necessity of an operation ; and in vain did we endeavor to convince them otherwise. We deemed it useless to insist on an operation under existing circumstances, but contented ourselves with controverting the notion that its discharge was a sufficient reason to delay the operation, and told them it was probable she would be placed under less favorable circumstances for an operation when it would be absolutely necessary for one to be performed.

After expressing our views, we passed on to Terre Haute. While there our patient was taken with a remittent fever, and during the second exacerbation of fever the blood-vessels of the tumor gave way, and an alarming hæmorrhage ensued. A messenger was immediately despatched, and we were hurried back to the patient. July 26th, we found her much exhausted from fever and loss of blood, and still bleeding.

In consultation with Drs. Somes, Davis, Ohowver, and Elliott, it was agreed that an operation was the only possible expedient to save her from a speedy dissolution ; and that even that was extremely doubtful under existing circumstances ; such as her great debility, considerable fever, the quantity of blood she had already lost, her mind agitated with fearful apprehensions, and the tumor collapsed into a loose mass, all tending to an unfavorable prognosis. By the assistance of the above named gentlemen the operation was commenced in the usual way of extirpating cancerous breasts, by making two semicircular incisions, and dissecting back a sufficiency of the integuments to cover the exposed surface after the removal of the tumor. The tumor was then cautiously dissected from above downward ; great care being taken to tie the arteries as they were exposed. Thus the whole tumor was carefully and entirely removed, leaving the pectoral muscle bare. The patient was then laid on the bed to recover from syncope, the flaps lying open and the whole covered with lint.

I would here state that our patient was remarkably courageous, and bore the operation with a fortitude seldom witnessed in the most extensive operating theatres. She was supported by wine and water as occasion required. After she had somewhat revived, and finding no hæmorrhage on raising the lint, the flaps were properly adjusted and retained by adhesive straps. The compress and bandage completed the dressings. She was then cheered, encouraged, and congratulated, which elicited from her a smile prospective of returning health, and all faces beamed with gratitude and thankfulness for such a deliverance.

In a few days her fever subsided, the healing process commenced and kindly progressed. Three fourths of the flaps healed by the first intention ; and in three weeks from the day of operating, she returned to her domestic circle ; when three weeks more completed the entire healing of the wound.

Viewing her situation previous to the operation, when she was prostrate beneath the arm of disease, and to all appearance on the verge of dissolution, and seeing her now, reinstated to health, family, and friends, we cannot but consider this case a striking illustration of the powerful influence of our art in meliorating the condition of man, and a conclusive confutation of the vulgar prejudices entertained against it by some.

Dissection of the Tumor.—The tumor was opened by cutting through a thick capsule formed apparently of condensed cellular substance. On its surface next the skin the capsule firmly adhered. The substance of which the principal part of the tumor was composed, was made up of irregularly shaped masses, in color and texture somewhat resembling the masses which compose the pancreas, and appeared to be connected with each other by a fibrous substance of a looser texture.

A very small portion extending from the nipple to the clavical margin of the tumor, bore the appearance of healthy gland. This was half an inch thick at the nipple, and gradually increased in thickness as it ascended to the margin, and composed perhaps one twelfth part of the whole separate from the fluid. It is remarkable in this case, considering how small a portion of the whole mamma was in a healthy state, and shaped as it was, that milk was pressed from the nipple only two weeks previous to the operation.

The cavity of the tumor occupied its centre, extending principally below and three or four inches above the centre.—*Transylvania Med. Journal.*

IS PUERPERAL FEVER INFECTIOUS?

In a Letter to the Editor of the London Medical Gazette.

Sir,—The letter of Dr. Campbell on puerperal fever, which appeared in the Medical Gazette of December 10th, has recalled my attention to certain facts in my possession, calculated to throw some light on the query which heads this communication. At the present moment, when the laws of infection are the subject of eager and dubious controversy, the facts I shall adduce may possibly interest some of your readers.

"On the question of infection (Dr. Campbell observes) I am as much as ever impressed with the belief, that unless the practitioner has been engaged in the dissection of the bodies of those who have fallen victims, the disease cannot be conveyed by him from females laboring under it to others recently delivered; but if he have been so engaged, I have strong reasons for believing that he may be the means of propagating it." My experience is not in unison with this conclusion. On the 4th of January last (1831), a meeting of the medical officers of the Manchester Lying-in Charity was summoned in consequence of a great mortality having occurred, during the four preceding weeks, among the patients of one of the midwives. The circumstances we found to be these: Mrs. A. B., a midwife in great practice among the patients of the Charity, had on the 4th of the preceding month (December, 1830) delivered a poor woman, who soon died with symptoms of puerperal fever. From this date to the 4th of January inclusive—exactly one month, this midwife delivered thirty women residing in different parts of an extensive suburb, of which number sixteen caught the disease, and all of them ultimately died. These were the only cases of puerperal fever which had for a considerable time occurred in Manchester. The midwives, commonly twenty-five in number, deliver, on an average, ninety women per week, which is about three hundred and eighty in a month. Now of this number delivered during the month in question, none had puerperal fever except the patients of Mrs. A. B. Yet all this time this woman was crossing the other midwives in every direction, scores of the patients of the Charity being delivered by them in the very same quarters where her cases of fever were happening.

The following statement, transcribed from Mrs. A. B.'s day-book, specifies the dates of the deliveries of the women, discriminating those who took the fever :—

	Deliveries.	Had Puerperal Fever.
1830, Dec. 4,	one	one
5,	one	—
6,	two	one
7,*	four	one
18,	three	two
22,	one	—
23,	one	one
24,	one	one
25,	two	two
1830, Dec. 26,	two	—
28,	one	one
30,	two	one
31,	one	—
1831, Jan. 1,	four	two
2,	two	one
3,	two	two
	thirty	sixteen

The decision of the medical officers of the Charity was to the effect that Mrs. A. B. should abandon her practice for a short period, and go to the country. In a short time after this meeting, cases of puerperal fever among the patients of other midwives, as well as in private practice, began to appear in various parts of the town. In the course of the spring months a great number of women died of this fever. It never prevailed more generally, nor perhaps ever more fatally, in Manchester. By about the beginning of June it had disappeared.

The fact that sixteen cases of puerperal fever occurred in one month in the practice of a single midwife, while the patients of the other midwives were exempted from the disease, leads naturally to the conclusion that this midwife was the *medium* of communicating (I take not upon myself to say *in what manner*) the malady from one woman to another—from one affected with the fever to another in health ; for the reader will observe that the midwives always visit their patients during the first three days after the delivery, if doing well ; and for a longer period, if sick. Again, little more than half of the thirty women delivered by this midwife during the month before mentioned took the fever. On some days, all the women she delivered escaped ; on other days, out of three or four, one or more of them were seized. This is no way opposed to what is observable in the career of other infectious maladies, and may be explained by assuming that there is a difference in different women, and perhaps in the same women at different times, in regard to predisposition ; that the fever was occasionally conveyed *directly* from the diseased to the whole, I possess other evidence than I have stated. In one instance, within my knowledge, a practitioner introduced the catheter, in the case of a poor woman laboring under puerperal fever, late in the evening ; and in the course of the same night he had to attend a lady in her confinement a little way in the country. On the morning of the second day after delivery, this lady had a violent rigor, and the other early symptoms of the malady. In another instance, a surgeon was called while in the act of inspecting the body of a woman who died of this fever, to attend a labor: within forty-eight hours after being put to bed the woman was seized with the fever.

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* Here an interval elapses of ten days without any deliveries having taken place—a circumstance which I can only account for by supposing, what is probable, that the midwife, in alarm, voluntarily suspended her operations.

That, besides being infectious—that is, capable of being conveyed, in some tangible medium, from one woman to another—this disease is propagated by some cause of a more general kind, probably existing in the atmosphere, *after the fever has prevailed for some time in a locality*, cannot be doubted. Numerous cases occurred during the late epidemic in Manchester; the origin of which could not, I apprehend, have been traced to infection properly so called.

The morbid appearances in our epidemic, resembled, in most respects, those mentioned by Dr. Campbell, as noticed by him in that of Edinburgh. Phlebitis, although diligently sought for, was not, that I am aware of, detected in a single case. Traces of inflammation of the peritoneum, generally slight, sometimes severe; inflammation of the pleura, with effusion of serum into the chest, and softening and disorganization of the ovaria, were the usual appearances. In one case, which I inspected, there was great enlargement, thickening, and remarkable softening of the uterus, with other appearances indicative of putrefaction, such as greenness over the lower abdomen, about the pudendum, on the inside of the thighs and arms, and separation of the cuticle, as if it had been detached by a blister. This was the state of the body, exactly twenty-five hours after decease. The ovaria, I ought to have mentioned, resembled masses of venous blood. The patient, a woman of great vigor, was in perfect health on Saturday; fell in labor on Sunday; in the course of the night, while in labor, had a violent rigor, and began to complain of tenderness in the abdomen; was delivered early on Monday, and died on Tuesday at noon. I am not aware that there were any other cases, during the epidemic, with symptoms and appearances similar to those of this woman.

The cases of puerperal fever, according to my observation, were resolvable into three classes: first, those, the most numerous certainly, in which no medical treatment was of avail, where the pulse was 140 and upwards, resembling, in the most striking manner, the pulse when rupture of the uterus has taken place in labor; and where the heat of the surface never rose to the natural standard. Second, those where leeching, calomel and opium, blisters, and other counter-irritants were indicated, and occasionally proved successful. Third, those cases in which bleeding by the lancet, owing to the complete development of the heat of the body, the acuteness of local pain, and the distinctness and comparative strength and hardness of the pulse, was clearly indicated; and which, when employed early in this variety of the disease, was almost uniformly successful. The last class of cases became more prevalent towards the decline of the epidemic. During the first two months of its prevalence, on the contrary, very few cases recovered. In consequence of the *kind* of persons attacked by the puerperal fever—mothers of families—the ravages of the disease are in the highest degree astounding and deplorable.

Those practitioners who have encountered the progress of this epidemic need not fear that they will find in the aspect and mortality of any other disease, although it may be of more famous name, features more formidable and success more disheartening. Yours, respectfully,

John Roberton.

Manchester, December 15th, 1831.

HEMICRANIA.

On one of those Affections designated Migrane (Megrim), or Hemicrania. By M. Piorry, M.D.

The foregoing subject occupies some twenty pages of M. Piorry's late work. The author observes that, under the term hemicrania, authors have arranged several different disorders. Chaussier and his followers have pronounced it a neuralgia of intermittent or continued character, and of greater or less intensity. The author agrees with this opinion; but observes, that hemicrania cannot always be considered as a facial neuralgia. It differs, he remarks, materially from tic douloureux, and also from the pains occasioned by carious teeth. If, indeed, says he, we understand by the word hemicrania, a pain seated on one side of the head, almost all neuralgia of this part must come under the designation, since few of them attack more than one side of the body, or pass the median line. But if, by hemicrania, we mean a specific affection, having its seat in or near one of the eyes—differing from all the other neuralgiæ—followed by sickness and generally relieved by vomiting—ceasing after a single paroxysm, not to return for a considerable time in general—then we must separate hemicrania from the other neuralgiæ with which it has hitherto been confounded, in order to study its symptoms, its signs, and its treatment. The author affirms that he has paid great attention to this disease—and thinks that investigation of it throws some light on the neuroses in general.

The complaint in question is conceived by the author to be a neurosis, or rather a neuralgia of the iris, which, at first bounded to that membrane, or, more properly speaking, to its nerves, extends to a number of other nervous branches, and is characterised by disturbance of vision, succeeded by pain in the eye, or on the surface of the cranium, by sickness, and by vomiting. This ophthalmic neurosis is observable among people whose sight is weak, to whom strong light is disagreeable, and dark rooms pleasant—who study and write much—who lead a sedentary life—and among workmen who are much occupied with the inspection of minute bodies.

On the other hand, we rarely see this complaint in people who lead an active life in the open air—who are habitually exposed to a strong light—and who do not exercise the eyes much. It occurs chiefly, according to the experience of the author, under two opposite conditions of the stomach—a state of too much repletion, and too great abstinence. In people, in these conditions, a very slight exertion of the eyes will often bring on the ophthalmic neuralgia. A physician of the author's acquaintance generally experienced an attack of this complaint every time that he read a lecture on medicine. Whenever he left off lecturing, or at least the reading of his lectures, he ceased to have the hemicrania ; and whenever he resumed the avocation, the disorder returned. It was remarked that these lectures were delivered on a full stomach directly after dinner.

The hour of attack, however, is not confined to any particular period —sometimes immediately after the application of the exciting cause— sometimes not till after several hours, but generally within the twenty-four hours. At the moment of the invasion, the sight becomes less clear, and there appears a kind of black speck in the centre of the eye, which gradually enlarges and spreads to the other parts of the organ, still partially surrounded by the arc of a luminous circle, of different colors in different individuals. After a time, this dark centre and sparkling circle begin to grow less distinct, and at last break up and disappear, with return of vision. These phenomena rarely take place, except in one eye. Thus far there is no pain experienced ; but only a kind of stupor, with some derangement of vision and heaviness of head. But after a longer or shorter interval, some darting pains are felt in the eye and temple, and the least pressure on the ball of the eye causes much suffering. The patient complains that the globe of the eye feels too full, attended with pulsation of a dolorous kind. These sensations are not uniformly pungent, but remit and exasperate, like colic or spasmodic pains in other parts. The duration of these attacks varies from some hours to two or three days.

Meantime the senses of hearing, tasting, and smelling, are more or less deranged with that of sight. The eyelids become red and tumefied—the access of light is insufferable—the least noise offends the ear—and the taste for food is quite perverted. The sensorial functions are undisturbed ; except that there is a greater tendency to sleep than usual.

Such are the phenomena of cases the most simple ; but very frequently the stomach participates in the complaints of the eye. Soon after the ophthalmic symptoms commence, eructations from the stomach take place, followed by some nausea, and even by vomiting of the food lately taken, or, if empty, of glairy mucus. In severe cases the stomach is not the only organ which sympathizes with the eye. Often one side of the tongue or of the face, or one of the upper or lower extremities, experience a kind of painful tremor or vibration, like that which is felt after striking the cubital nerve, at the elbow, against some hard body. In general, the heart, lungs, and intestinal canal, remain free from any morbid affection. A restorative sleep usually terminates the paroxysm, after several hours', or two or three days' duration. A heaviness of the head is felt for a day or two after the cessation of the hemicrania. The recurrence of the malady is uncertain ; and generally only when the exciting causes are strongly applied. Our author knows a female who has six months' interval between the attacks, provided she does not read within two hours after taking food. If she uses not this precaution, she is sure of an attack immediately after her transgression. In certain individuals the attack is periodical, returning every eight days, every month, or every two or three months, with considerable regularity. In others, there is no fixed period for relapse.

The prognosis in this curious complaint, is generally favorable, as far as life is concerned ; but if the complaint proves rebellious, it renders life miserable. When it fails to be cured, the paroxysms return at shorter and shorter intervals, till life becomes one scene of suffering. Our author has not been able to find any information respecting the pathological anatomy of hemicrania ; but suspects that the scalpel will not reveal any lesion of structure in the brain or membranes to account for the phenomena. This neuralgia, he imagines, is too fugitive, subject to too many remissions or intermissions, to leave organic traces that might be detected by the eye. He justly observes that the dissecting room is not the only place where we may study pathology. The sick-room will often afford us much useful information in this respect. An examination of the eye, during the attack of hemicrania, shows the pupil strongly contracted, and consequently the iris put upon the stretch, with redness of both palpebræ. From these phenomena M. Piorry concludes that, in hemicrania, an exciting cause acts on the retina and iris—the nervous action is modified—a kind of struggle takes place, evinced by oscillations and vibrations, with the luminous circle, dark spots, &c. before alluded to. In time, the fifth pair of nerves participate in the morbid action, and ultimately other organs and parts with which the fifth pair communicate.

Treatment.—Our author considers himself as very successful in the treatment of this painful malady. His first indications are to arrest the development of the series of symptoms constituting hemicrania—and to mitigate its accessions (calmer ses accés). It is at the moment of its commencement that the course of the malady is most easily checked. At this period all causes of excitation in the optic nerves and tissues should be removed. The patient is to be completely excluded from light and noise. This abduction of all stimulus will sometimes induce early sleep, and check the paroxysm. It is at this early period that the application of belladonna has occasionally succeeded in preventing the pain. The author and his colleague, M. Trousseau, cause the remedy to be rubbed on the temples with the greatest success. M. Piorry dilutes the belladonna with a little water so as to form a kind of syrup, which is rubbed on the palpebræ as well as on the temples. The author uses only a very small quantity of the remedy, from one to three or four grains. He avers that he hardly ever fails to check the paroxysm by this means. It is to be borne in mind that, on the succeeding day after the application of the belladonna, the pupils will be greatly dilated, and vision disturbed. But this effect and inconvenience are only temporary. The author has not employed belladonna internally. He has used opium, but with very indifferent effects. M. Piorry observes that the march of hemicrania may often be arrested by raising excitement in the stomach, by means of stimulants, as wine, spices, food, &c. A very smart stimulation to the feet will sometimes have the same effect. In case of failure, each symptom can only be combated by the most probable means. Quietude and darkness—cold applied to the eye affected—vomiting by means of large ingurgitation of warm water, will mitigate the pain, and somewhat curtail the paroxysms.

The prevention of a return then becomes the great indication. The causes already enumerated are to be avoided, and especially all exercise of the eye in reading during the operation of digestion. After this process is finished in the stomach, the patient need not fear to engage in study or other exercise. Exposure to a strong light, however, and sudden transition from a dark to an illuminated room, are dangerous. Sometimes a local plethora predisposes to hemicrania; then abstraction of blood is proper. On the other hand, where the patient leads a sedentary life, and is debilitated, we ought to prescribe nourishing food, which is the best of all tonics. Great attention to the bowels is necessary, since constipation often renews the attack. It is remarkable that the author appears to have had but little experience of the efficacy of quinine in this complaint—and of arsenic he makes no mention at all. Yet these are the most potent of all remedies in the disease under consideration. We have met with the complaint very often—indeed, it is by no means unfrequent in this metropolis, among artists and others who lead a sedentary life, using the eye much, and the muscles of the body little. In these people, we have first cleared the bowels, and then given a sudorific at bed-time, with a good dose of colchicum and Batley's liquor opii sedativus. After this the quinine, arsenic, or both united, have seldom failed to put a sudden stop to the complaint. Quinine in small doses, for some weeks afterwards, is necessary to prevent relapses.—*Med.-Chir. Rev.*

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BOSTON, MARCH 21, 1832.

ALLEGED MAL-PRACTICE.

The following notice appeared in the Litchfield (Connecticut) Enquirer of Thursday last.

"The Superior Court of this County, Judge Daggett presiding, closed its sessions on Tuesday night last, after an arduous session of fifteen days. Besides the criminal trials, there was a number of civil cases disposed of, among which was the following:—

"*Harriet A. London* vs. *Dr. Asahel Humphrey.*—This was an action for mal-practice in performing the operation of vaccination upon the left arm of the plaintiff, in March, 1829. It appeared that the defendant and sundry other physicians had made a contract with the Board of Health of the town of Salisbury, to vaccinate the inhabitants of that town—that the physicians divided the town into districts to enable them to perform with facility the duty assigned them—that the plaintiff resided in the district confined to the care of the defendant; that the defendant employed one Rollin Sprague, a young student of medicine, to attend to the business for him as his agent, and that Sprague vaccinated the plaintiff, and made two punctures just above the elbow joint in a very unusual place—the effect of which was immediate, and was attended with the most serious consequences, indicating, in the opinion of Professor Hubbard and others, with unerring certainty, that a nerve had been wounded. It was proved that the injury was probably incurable. The case underwent an elaborate investigation, and the jury rendered a verdict for the plaintiff—$400 damages."

The foregoing case and decision are calculated to excite the astonishment of every medical man. It is unquestionably the only case of the kind on the records of any court in any portion of the civilized world. The process of vaccination is and has long been performed by parents ignorant of physic or anatomy, on their own children, by officious women, itinerants, and people of almost every grade of ignorance and carelessness, and yet never have we heard of a single instance in which harm has come of the incision. Nor can we conceive in what way the case above noticed could have been made out. The puncture for vaccination is made merely through the cuticle, so as to admit the matter to the mouths of the cutaneous absorbents : how it could have been carried deep enough to injure any important nerve, is matter of surprise, and we confess ourselves somewhat incredulous of the justice of the decision. It is to be hoped that a proper and detailed report of the case will soon be furnished to the medical public.

The New Styptic.—MM. Talrich and Halma-Grand deposited at the Academy of Sciences, in Paris, on the 26th September, a sealed packet, containing the composition of their liquid for arresting hæmorrhage. It is to be opened as soon as a series of experiments now in progress have been completed. The following is an account of some of these trials. Fifteen sheep have publicly had the carotid artery opened : four lengthways, nine across, and two with an oval portion cut out. In all of these the bleeding was arrested in four or five minutes, and the cicatrization completed in a few days. The same result was obtained on the horse whose carotid was opened a few days ago in the abattoir at Montfaucon. In order to stop the bleeding, dossils of lint, steeped in the fluid, are applied with some degree of pressure, and afterwards suffered to remain there. The writer in the French journal from which we take these particulars, says that he was very lately called to a young gentleman, who had had copious bleeding for twenty-four hours, in consequence of having had a tooth extracted from the lower jaw. Various approved methods had been tried without avail, and the actual cautery was just about to be had recourse to, when it was determined to give the styptic of MM. Talrich and Halma-Grand a trial. In seven minutes the bleeding was completely stopped.

A correspondent informs us, that the styptic above alluded to has been tried at St. George's Hospital. The carotid artery of a sheep was opened by means of a longitudinal incision, about two lines in length ; dossils of lint were applied, and covered with compresses, which were retained in their place with some firmness for about a quarter of an hour ; they were then removed, the lint being suffered to remain. The animal was set at liberty, and no bleeding occurred. At the end of some days it was slaughtered. On examining the parts, great extravasation of blood was found in the cellular texture round the vessel, while itself contained no clot.

In consequence of a circular letter of invitation, a considerable number of persons assembled to witness some farther experiments. The first consisted in laying bare the carotid artery of a sheep, and cutting out a portion of it with a curved scissors. Portions of lint, about the size of a small walnut, steeped in the styptic, were applied to the wounded vessel, the first being kept steadily in its place for ten minutes, and two or three others successively laid over it, the whole process occupying a quarter of an hour. The animal was then unbound, and suffered to rise, when the lint was instantly thrown out, and the animal bled to death. In another the carotid artery was cut across to the extent of about half its calibre, and then treated as above, with the addition of a stitch, to retain the lint in its place. No hæmorrhage followed; the stitch and lint were removed next day, and the animal appears to suffer little inconvenience.

Value of the Blood in Diagnosis.—Sir Astley Cooper gives us a valuable lesson in the following case: A man in Guy's Hospital, in the last stage of scurvy, whose skin would ecchymose from the slightest pressure, and from whose gums blood was oozing, was bled, (a little being taken as an experiment,) and even the blood was both sizy and cupped!

New Treatment of Painter's Colic.—A French Physician, M. Gendrin, has found this disease to yield with unusual facility to the free internal administration of alum. He has reported to the Institute the result of his trial of this practice in fifty-eight cases, all of which were cured by it. He administered from one to three drachms a day, in solution, and found it more efficacious when, at the same time, his patients drank freely of water acidulated with sulphuric acid.

Removal of the Lower Lip.—This operation was performed on Thursday last, at the Massachusetts General Hospital, by Dr. George Hayward. The occasion of the removal was a cancer, which had become so diffused as to involve the integuments to such an extent that the edges of the wound could not be approximated. The diseased parts were taken away with little hæmorrhage, and the patient bore the operation well.

Whole number of deaths in Boston for the week ending March 16, 29. Males, 14—Females, 15.

Of scarlet fever, 5—childbed, 1—disease of the heart, 1—consumption, 5—paralytic, 1—inflammation on the brain, 1—dropsy, 1—lung fever, 1—drowned, 1—measles, 1—brain fever, 1—inflammation on the lungs, 1—hip complaint, 1—throat distemper, 2—putrid sore throat, 1—old age, 2—croup, 1—unknown, 2.

ADVERTISEMENTS.

HISTORY OF THE CHOLERA MORBUS.

Just published by CARTER & HENDEE, a Medical and Topographical History of the Cholera Morbus, including the mode of Prevention and Treatment, by Scouttetten, adjunct Professor at the School of Medicine at Strasburg, member of the Royal Academy at Metz, &c. &c., with a Report read at the Royal Academy of Medicine at Paris, Sept. 17, 1831. Translated from the French, by A. Sidney Doane, A.M., M.D. m14

REPORT OF THE ROYAL ACADEMY OF MEDICINE to the Minister of the Interior, upon the Cholera Morbus, published by order of the French Government. Translated from the French by John W. Sterling, M.D. Just received by CARTER & HENDEE. March 14.

A DICTIONARY OF MEDICINE, designed for popular use. By Alexander Macaulay, M.D. Second English edition. Just received by CARTER & HENDEE. March 14.

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ABSORBENT GLANDS AND SPLEEN.

On some Morbid Appearances of the Absorbent Glands and Spleen.

By D. Hodgkin.

If there be any accounts in books relative to morbid alterations of structure like those about to be described, they can be but little known; the author knows of none, and there is the more room and apology for the present observations.

1. The first case deserving of notice is that of Joseph Sinnott, nine years of age, a patient in Guy's Hospital, admitted laboring under ascites and effusion into the prepuce and scrotum.

Inspection.—Serous effusion under the arachnoid and within the ventricles. Substance of the brain soft and flabby. Pleura much affected with adhesions; fluid in the cavity. A few tubercles in the lungs. Heart healthy. Peritoneum had been recently and extensively inflamed; a sero-purulent effusion in the cavity. Viscera overlayed generally with a soft light-yellow coagulum. The mesenteric glands enlarged—one or two considerably so, equaling in size a pigeon's egg, of semicartilaginous hardness, and streaked with black matter. Liver pretty natural. Spleen large, and containing numerous tubercles. Kidneys mottled, of a light color. A continuous chain of much-enlarged, indurated, absorbent glands, accompanied the aorta throughout its course, closely adherent to the bodies of the vertebræ, and extending along the sides of the iliac vessels, so far as they could be traced in the pelvis; none of these vessels had been sufficiently compressed to occasion a coagulation of the contained fluids.

2. The next case is that of Ellenborough King, aged ten years, a patient of Dr. Bright. Until thirteen months ago this child had been healthy; a tumor was then observed in the left hypochondrium, which, under treatment, was very considerably reduced; the glands on both sides of the neck were swollen, the abdomen was somewhat distended, and there was considerable œdema of the scrotum.

Inspection.—The glands in the neck, when cut into, exhibited a firm cartilaginous structure, without any appearance of softening or suppuration. The glands of the vessels in the chest were in the same state. The lungs generally healthy; there was a considerable quantity of fluid in the peritoneal cavity. The glands accompanying the aorta, the splenic artery, and the iliacs, were as those of the neck. The spleen was enlarged to four times its natural size, studded with tubercles, and presenting the same structure as the glands just mentioned.

3. William Burrows, aged 30, admitted for scrofulous ulcer in the axilla and neck; had been previously in the hospital for secondary symptoms, which were supposed to have been treated with large quantities of mercury. Before he died, abdominal dropsy had made its appearance.

Inspection.—The cavity of the chest contained about a pint of serum. Heart small and flabby; the liver of a shrunken, irregular shape, indurated, pale, and pervaded with a substance of a white, hard, tuberculous character. It appeared to Dr. Hodgkin, that the liver was in that state which is almost peculiar to those who have labored under a cachectic condition from mercury. The spleen twice its usual size, unusually firm, and, when cut into, exhibited a dense, dark-red, homogeneous structure. Some of the mesenteric glands much enlarged, and filled with white deposit; almost all the other glands of the trunk were similarly affected.

4. Thomas Westcott, aged 50, presented a great enlargement of nearly all the absorbent glands within reach of examination, but more especially of those in the axilla and groins.

Inspection.—The glands of the axilla proved the larger the deeper they were seated; when cut into, they appeared of a light white color, with very few vessels; in consistence, they very much resembled fungoid tumors. The glands in the groin of a similar character; the alteration in this case seemed to consist rather in an interstitial deposit, from a morbid hypertrophy of the glandular structure itself, than of a new or adventitious growth. The glands about the abdominal aorta and iliac arteries were as those in the preceding cases. Liver very large. Spleen at least nine inches long, five broad, and proportionately thick; its structure consisting of an almost infinite number of small white globules, appearing to arise from deposits in the cellular tissue of the organ.

5. In the next case, which was that of a middle-aged man, the last urgent symptoms were referable to the chest.

Inspection.—The glands of the neck, and those near the upper part of the thyroid cartilage, were very much enlarged. The pleuræ exhibited traces of recent inflammation. A large quantity of serum in the abdomen. The liver remarkably large, weighing upwards of seven pounds; the acini somewhat enlarged, but not fatty, as it was at first supposed. Spleen four or five times its natural size, but it contained no tubercles; the cellular tissue, however, was more conspicuous than usual in the intestines of the parenchyma. The absorbent glands about the aorta were all enlarged; some of them the size of a pullet's egg.

6. Thomas Black, aged 50, was affected with swellings of the neck and axillæ; his abdomen was greatly distended, and his breathing difficult. On examining his body, in both chest and abdomen the absorbent glands about the great vessels were enormously enlarged.

The enlargement of the glands, both in this and the preceding cases, appears to have been a primitive affection of these bodies, rather than the result of an irritation propagated to them from some other inflamed structure. Their enlargement is unattended with pain, heat, or any of the other symptoms of inflammatory action: nor is it accompanied by any alteration in the surrounding tissues, or by a disposition to the production of pus. Notwithstanding the different characters which the enlargement in question may present, it appears nearly in all cases to consist of an uniform texture throughout, rather the consequence of a general increase of the whole gland than of a new structure displacing the original one, as is the case when ordinary tuberculous matter is deposited in these bodies.

The state of the spleen, too, is very remarkable, inasmuch as in all the preceding cases but one, it was found diseased, and in some of them thickly pervaded with bodies in structure resembling the diseased glands. Now, although in human spleens no glandular tissue is distinguishable, in those of some inferior animals a multitude of minute bodies exist, which appear to be of that nature. Malpighi, indeed, considered the acini of the spleen to be glands. And Dr. Hodgkin conceives, that if there be, as there appears to be, a close connection between the derangement of the glands and that of the spleen, the latter is a posterior effect, and thus may not always have been produced before the patient is carried off. In further confirmation of this view, he appeals to the pathological collection of Dr. Carswell, among which, having accidentally found a drawing of an immense spleen, loaded with tubercles, like those above described, he was agreeably surprised by the sight of another drawing, of greatly enlarged glands of the neck, axilla, and groins, from the same subject. Dr. Carswell called it a case of cancer cerebriformis of the glands and spleen, and his account of it was to this effect :—The man in whom the morbid appearances were found, had been a patient at the Hôpital St. Louis, Paris. He was between 30 and 40 years of age, and had these glandular swellings apparently for three or four months, without pain, and with little inconvenience. But a short time before his admission he felt a difficulty in swallowing, which had at length come to that height that he could take no food whatever. He lived only two days, in great suffering. Here an account of the examination of the body was given from Dr. C.'s notes, and intended to be illustrated by his unrivaled drawings ; but owing to an accident the latter had not come to the society. The account tallied most exactly with Dr. Hodgkin's observations already given ; but the Doctor did not agree with his friend Dr. C. in applying to these enlargements the appellation of "cerebriform cancer." In one case, indeed, Dr. Hodgkin had likened the growths to fungoid structures, but a closer examination detected abundant difference.

Besides the preceding instances from the dead, the author has met with similar examples of diseased or altered glands among the living. A Jew, between 40 and 50 years of age, came under his observation with the glands of the neck prodigiously enlarged, forming smooth ovoid masses, unaccompanied by inflammatory symptoms or thickening of the surrounding cellular structure. Those of the axillæ and groin were in the same state. There was no appearance of dropsical effusion about him. In another case, that of an emaciated child, an out-patient of Guy's Hospital, similar appearances were observed.

In conclusion, Dr. Hodgkin confessed that he had nothing to offer with regard to treatment, either curative or palliative. Most of the patients had only sought relief when the disease had reached an advanced and hopeless stage ; and in the case of the Jew, the cascarilla and soda, and the iodine, appeared to be productive of no advantage. At an earlier period of the complaint, the indications would seem to be, to increase the general vigor of the system, to protect them from exposure to cold and inclement weather, to employ iodine externally, and internally to push the use of the caustic potash as far as circumstances might render it allowable.—*London Medical Gazette.*

BRONCHIAL AFFECTIONS OF CHILDREN.

On the Treatment of the Bronchial Affections of Children. By Marshall Hall, M.D. F.R.S.E. &c.

I have seen so many deplorable results from the undue employment of bloodletting, and so many happy effects from the use of ipecacuanha in emetic doses, in the bronchial affections of children, that I think it highly important to bring these two subjects before the profession.

According to my experience, bloodletting is ill borne in the bronchial affections of infants. The little patients soon become pale, with glossy cheeks, half-closed eyelids, slight torpor, and a very frequent pulse.

With these symptoms, the bronchial affection is frequently little or not at all improved. There is an undiminished tracheal and diffused bronchial rattle, and frequently a husky voice and croupy cough.

Such cases have been particularly frequent recently. One of the most interesting which I have witnessed, occurred in the little infant of Mr. Wright, surgeon, Howland street, four months old. One leech only had been applied, but it had blanched the countenance, and induced the peculiar waxen hue of the cheeks, so significant of exhaustion. There was slight torpor, and the eyes were only partially closed. There was unrelieved diffused bronchial rattle, and an alarming croupy cough. Further depletion was inadmissible. The case was treated by five-grain doses of ipecacuanha, in the manner about to be described, with the most marked immediate benefit and the happiest result.

In another case, of an infant six months old, in which four leeches had been applied, the pulse had risen to 190 ! A truce from exhausting measures *permitted* the pulse to subside. The infant recovered without the further detraction of blood.

My object, however, is not to detail cases, but to give the general result of my experience. This is, that bronchitis in children neither bears nor requires much bloodletting ; and that such bloodletting is not *the* remedy for bronchitis.

On the other hand, the good effects of repeated emetic doses of ipecacuanha are so striking and so immediate as to leave no doubt of the efficacy of this remedy in this particular case.

In the first place, the mere effect of vomiting, which is first an effort of expiration, and finally full expiration itself, relieves the upper parts of the bronchial tubes of the accumulated mucus.

In the next place, the effect of nausea in subduing the powers of the circulation, and especially of the capillary circulation, is quite remarkable, whilst this effect, being unattended by exhaustion, is totally free from danger.

It is probable, too, that ipecacuanha produces an effect upon the bronchial membrane similar to that observed on the skin. The secretion of mucus succeeds to a state of dryness, and the mucus itself is of less tenacity and easier of expectoration.

However, the rationale apart, I may give the result of my experience in general terms, and say that of all our remedies for bronchitis in children, repeated emetic doses of ipecacuanha, after moderate bloodletting, is the most efficacious. In little infants, five grains may be given and repeated every three, four, or six hours. The dose must generally be augmented to ten or fifteen grains, especially in older children.

To the ipecacuanha I have always added castor oil, in the intervals of sickness.

Blisters and fomentations to the chest are also highly advantageous.

But the principal object of my present communication is to point out the danger and inefficiency of bloodletting, and the extreme value of ipecacuanha, in this particular disease of children. Bloodletting, to be safe, must be administered cautiously. The ipecacuanha, to be efficacious, must be administered in fuller and more repeated doses than those generally prescribed. I have repeatedly known a single emetic dose of ipecacuanha subdue a recent bronchitis; and I have known repeated doses subdue the most inveterate. These repeated doses are not attended by the slightest risk. Let the nausea and the vomiting subside, and the disease will frequently be found to be perfectly removed, whilst the powers of the system are unimpaired. Few remedies of such powers are so free from danger, in the feeble and tender age of infancy. If the disease be obstinate, the remedy may be repeated until it *does* prove efficacious.—*Ib.*

SCALDING OF THE THROAT.

A Case of Scalding of the Throat, in a Child, from drinking boiling Water, cured by opening the Jugular Vein. By Mr. G. O. Heming, Member of the Royal College of Surgeons.

Mr. Earle's interesting lecture has brought to my mind a case of the croupy affection, induced in children by drinking hot water, in which the use of bloodletting was distinctly and eminently advantageous. It may, therefore, form a useful addition to the cases placed on record by Dr. Marshall Hall, Mr. Stanley, and Mr. Earle.

John Noyes, aged two years and a quarter, was brought to me, about five months ago, by his father, who stated, that, seven hours previously, he had drunk some hot water from a tea-kettle.

The little boy was breathing with much difficulty, and the sound produced by respiration was similar to that which takes place in croup. There was an incapability of swallowing, and he seemed to suffer great pain.

I bled him from the jugular vein, to a state approaching syncope. The breathing instantly became considerably relieved. A cold lotion was recommended to be kept constantly applied to the throat, and, as he could not swallow, an injection was given to act upon the bowels.

Four or five hours afterwards I went to see him, accompanied by Dr. M. Hall (whose paper on the subject I had read some years before, in the Medico-Chirurgical Transactions), with the expectation that the child might require the operation of tracheotomy ; but we were agreeably surprised to find that, since the bleeding, the respiration had progressively improved, and the peculiar noise had entirely subsided. The little patient was quite well in a few days.

I would here just remark, that I have seen many cases of croup—one within the last few days—where leeches had been numerously and repeatly applied without affording any relief ; but the good effect of taking blood from the jugular vein to approaching syncope, was evident immediately, and apparently saved the lives of the little patients. From the case related by Mr. Earle, it is quite evident how serviceable the loss of blood may be in such cases ; as even the application of the leeches arrested the disease and afforded temporary benefit. In croup, the loss of blood is borne well, and one might suppose that the sensibility of the stomach may be in some degree diminished, as it requires larger quantities of ipecacuanha, or emetic tartar, to produce vomiting in this disease. This observation in regard to emetics, is also applicable to bronchitis in children.—*Ibid.*

For the Boston Med. and Surg. Journal.

REMARKS UPON MALIGNANT CHOLERA.

"*Malignancy is a state of the system in which there is a peculiar deficiency of vitality, attended with an insusceptibility to the curative action of ordinary remedies, in ordinary doses and quantities.*"—[American Medical Recorder, April 1828, page 292.]

If this definition of malignancy is correct, it would seem that there could be very little difficulty in accounting for the excessive mortality which has occurred both in Asia and Europe, during the prevalence of epidemic cholera. There is certainly a very striking analogy between the *cholera* of the eastern continent, and the *typhus syncopalis* which at various times, during the last twenty-six years, has prevailed in many parts of New England, and in other States. Whoever will consult Dr. Thacher's Modern Practice, and the Philadelphia editions of Gregory's Practice, as well as Dr. North's Treatise on Spotted Fever, and various practical works to be found in American pamphlets and periodicals, will soon be convinced, that the two diseases must either be varieties of the same species, or more probably species of the same genus, requiring obviously the same treatment in general, though unquestionably demanding variations according to particular circumstances. It is therefore proper to ascertain what has been the most successful treatment of American practitioners, in their disease. With the utmost confidence it may be stated, that in no instance has an epidemic of typhus syncopalis been successfully treated, except upon the principle mentioned in the preceding definition of malignancy.

From the first appearance of typhus syncopalis, at Medfield, in 1806, (then called *spotted fever*,) it was discovered, that ordinary remedies, in ordinary doses and quantities, would make no impression upon a bad case. Opium, essential oils, capsicum, aromatics, musk, alcohol, ether, external heat, rubefacients, epispastics, &c. if of any avail, must usually be employed in perhaps three or four fold frequency and quantity beyond what they are demanded in common complaints. The success of this energetic treatment, notwithstanding such a formidable disease must always be attended with some fatal cases, has been so great, that typhus syncopalis has now lost most of its terrors. Nine cases out of ten, and in many instances a much greater proportion of the patients, ultimately recover. It is believed, judging from the aggregate of the returns as far as received, that about a third of all the cases of cholera, during the present epidemic in Europe, have terminated fatally. If the statements which I have seen of the general practice are correct, and fair specimens of the ordinary treatment, the wonder is at the recoveries, and not at the comparative mortality. It is very evident, that a much greater proportion of the American cases would have failed, under such a relatively inert management as that directed by the most distinguished European writers, in their present epidemic.

It is unnecessary here to enter into further discussion of the subject. It is hoped that our physicians will consult the works which have been mentioned, and the other various essays which are referred to in those compilations. Those physicians who have been familiar with typhus syncopalis, pneumonia typhodes, and other malignant diseases, in their most sinking and malignant forms, can certainly be in no doubt as to the kind and degree of practice which is demanded in epidemic cholera. They must all have repeatedly seen cases as rapid and severe, which would have undoubtedly proved equally fatal, had it not been for an extremely active, energetic, and persevering treatment. CELSUS.

A CASE OF HEMICRANIA.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—The remarks contained in your last on that singular affection of the head most commonly known by the name of hemicrania, called to [illegible] of mind a case that I had recently under treatment; a case that presented few if any of the symptoms there enumerated, but which may yet be denominated a species of hemicrania.

A young lady offered herself as a patient, from whose general appearance her errand would never have been suspected. Though not of a sanguine temperament, her complexion was florid, and her countenance and general appearance were those of perfect health. The bowels were in good order, and all the functions seemed to be unimpaired. Her complaint was a severe pain, frequently recurring, on the whole left side of the head. It usually came on at night, and was not confined to the seat of any nerve, but equally diffused over the whole side of the cranium. The pain was usually severe, steady and not by tics, lasted about an hour, and then went off without treatment, leaving the parts, and the upper extremity of the same side, in a state of numbness that generally yielded to friction.

These paroxysms would often occur in the day time, but most frequently in the night, and they produced no permanent impression on the general health. The pulse was full and slow—the tongue not coated, but of a dirty brown color—the appetite tolerable, but not so much less than usual as to have excited observation—and her habits were sedentary.

In this instance, as I believe in most others, the hemicrania was wholly symptomatic of disorder in the stomach, was thoroughly and permanently cured by a powerful emetic, followed by a dose of compound infusion of senna and gentian, and a short course of tonics. It was not thought advisable to trouble the patient with blisters or narcotics ; and as far as my experience goes, in most forms of neuralgia, medicines of the latter classes are less serviceable than those of the former. The stomach is an organ that ought in all cases to be *suspected*,—it will be found to be the true though skulking offender in nine cases out of ten.

Boston, *March* 20, 1832. M. D.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, MARCH 28, 1832.

VACCINE VESICLE.

There is great variety in the size of the vaccine vesicle in different cases, and also in the quantity of limpid virus that may be obtained from it. It is probable that this depends, in a measure at least, on the manner in which the process of inoculation is conducted. An extensive incision, and the introduction of an abundant dose of fresh matter, are usually followed by a large and full vesicle, whilst the eruption produced by a minute opening will generally be small. In Edinburgh, where a vaccinating lancet with a rounded extremity is in common use, we have remarked that the vesicle is of greater dimensions than in other places here the puncture is made by a needle or common bleeding lancet ; and e know of no other reason than this for the difference alluded to. It may be also owing, in some degree, to the freshness and the liquid and consequently diffusible state of the matter ; for our observations there were made in the Dispensary, where, a certain day in each week being set aside for this business, the virus is transferred *immediately* from the vesicle on one child to the arm of others.

When it is an object to produce an abundance of fresh virus, therefore, as is the case in times of alarm, or of general vaccinations, we should advise that the cuticle be raised over a surface larger than usual, and the matter inserted in a liquid state. If fresh virus is not attainable, a thin paste made with warm water and the scrapings of the concave central portion of a circular crust, will answer equally well.

Dr. Howison, vaccinator to the Edinburgh Dispensary, has recently advanced the opinion that the true vaccine vesicle is not necessarily circular, as has been supposed, or of any other uniform figure. Its shape depends, so far as his experience has gone, and it has been ample, on the shape of the incision; and, says he, if a scratch were made wholly round the arm, and the matter there deposited, the vesicle would be annular, and still genuine and effectual. So far as extreme cases go, Dr. H. is doubtless correct. We apprehend, however, that there will always be found a strong tendency to the circular figure, and unless drawn from it by extravagant deviations in the bed, the true disease will always be such as we are accustomed to see it on the arm, and to find it described and represented in books.

PUBLIC VACCINE INSTITUTION.

We are happy to announce that a Vaccine Institution is established in this city, where the poor may obtain protection from the smallpox *gratuitously*, and the faculty, in town and country, an abundant supply of fresh virus, on the same liberal terms.

Various propositions have been made from time to time, with a view to extend this invaluable blessing to the poor, and to ensure a constant renewal of the virus. That which is now adopted by the City Government originated with the Boston Medical Association, which urged the plan on the proper authorities more than a year ago. It is calculated, better than any other, to accomplish the important purposes of such an institution in a vigorous and economical manner; and although at the expense and by direction of this city, its benefits are offered, without fee or reward, to the Practitioners and people of every portion of the Commonwealth. The daily number of applicants for vaccination is already considerable, and the matter taken each day is deposited in a separate phial and labeled, by Dr. Smith, under whose care, as Resident Physician, the conduct of the institution has been placed. Now that the source of virus is abundant, and accessible with so much facility, we would suggest to Town authorities in the various parts of the Commonwealth, the expediency of a general vaccination of all their unprotected inhabitants. That the regulations of the establishment may be generally understood, we give below a copy of a note which has been transmitted by the Mayor to the Physicians practising in Boston.

"Sir,—A public Vaccine Institution having been instituted by the City of Boston, for the gratuitous vaccination of all persons who may consider it a privilege to avail themselves of its benefits, you are respectfully solicited to co-operate with the City Government, in directing those who may apply to you for information, to the *Vaccine Office*, in the third story of the City Hall, over the room of the Mayor and Aldermen.

In order to ensure a supply of genuine vaccine matter, during the warm season, it has been found necessary to adopt the following regulations.—

First. The Resident Physician will be in the Office every Monday, from the first day of April to the first of October, from 8 o'clock in the morning till 2 o'clock, P. M.

Secondly. Children and others who are vaccinated at the Office, are earnestly requested to call again on the following Monday after the operation, in order to have it ascertained whether the vaccination has been successful.

Thirdly. Children will be furnished with certificates of having been vaccinated, in order to gain admission into the Public Schools.

Fourthly. Physicians in the City and Country will be supplied with pure vaccine virus, gratuitously, at all times, on application to the Resident Physician. CHARLES WELLS, *Mayor.*

Boston, March, 1832."

TREATMENT OF CHOLERA.

LITTLE light has yet been thrown on this interesting topic, in the countries where the cholera has prevailed. Powerful emetics of common salt or mustard, with the stimulus of heat, friction, and cauteries, externally, appear on the whole to constitute the most approved method of attacking the disease. Little, however, can be said in favor of any known treatment, whilst the mortality continues as great as it still is.

In London the mortality has not, so far as our accounts reach, materially varied from that exhibited by the bills of other afflicted places in Great Britain. It broke out in that city on the 12th of February. "*The first case reported to the Council was that of a ship-scraper, who had been employed, on the preceding day, on board a vessel from Sunderland.*" On the 17th of the same month, there had been fifteen other cases in London, and seven deaths by this disease. In Scotland, the ravages of the disease appear to be increasing, and the British Government are active in adoption of every means in their power of checking the destruction of the malady, allaying the popular excitement and alarm, and diffusing widely correct information respecting its character and progress.

A late writer, the latest indeed in England, suggests the same principle of treatment as was proposed by Dr. Hoit in a communication to this Journal, No. 4 of the present volume. He supposes, with Dr. H., that by producing a new and very powerful impression on the system, the disease may probably be overcome. This, he thinks, may be done by the inoculation of some virulent poison, and no one appears to him more promising than the Rhus toxicodendron. By introducing this beneath the cuticle, and at the same time administering it internally, a counteraction may be excited which shall take precedence of that which constitutes the cholera.

Most remedies that have been proposed for this disease, since its introduction into Great Britain, have been subsequently tried to a greater or less extent ; we hope, therefore, to be able soon to offer the reader some account of the practical application of the principle thus proposed.

We think, with our correspondent Celsus, that the modes of treatment hitherto described by foreign writers, have been surprisingly deficient in activity and boldness. The practice adopted by Dr. Page in the Spotted Fever, an account of which we have recently given, was much more decisive and powerful than any which has as yet, so far as the profession is apprised, been opposed to the cholera ; and yet the exaggerated symptoms of this malady clearly demand a more rather than less active medical treatment. Should it reach our shores, we are confident it would find, in American Physicians, a more formidable foe than it has yet encountered in other countries.

Means adopted in Edinburgh to mitigate the severity of Cholera.—A Board of Health has been formed, comprising the names of many of the most influential gentlemen of the place, and with such a host of talent in its medical department as must command the fullest confidence of the public. Five hospitals have been prepared in different districts of the town for the accommodation of the poor, and we have reason to hope that scientific and well-directed efforts will now be made to put to the test of clinical experience the various methods which have been proposed—particularly galvanism—different kinds of emetics—neutral salts—and others, with regard to which the accounts at present are so contradictory that it is impossible to draw any satisfactory inference. We understand that in Edinburgh six stations have been opened for the supply of provisions to the indigent, and that at present 5800 quarts of good soup, and 6500 rations of bread, are daily distributed. This is, indeed, setting about the thing in the right way, and the northern metropolis has shown an example which we should be glad to see imitated elsewhere.—*London Med. Gaz.*

Further Quarantine Regulations.—By proclamation of the Mayor of this city, a quarantine is laid on all vessels coming from any port in the Island of Great Britain. This measure has been rendered advisable by the continued prevalence of the cholera in that Island, and its probable extension to most if not all its maritime towns.

Gaining Courage.—The Italian practice, which we mentioned some months ago, of curing leucorrhœa by the administration of ergot in doses of five grains a day, has advanced in boldness with great rapidity. Some cases of profuse menorrhagia have recently been reported by Drs. Pignacca and Cabini, in which this medicine was successful in quantities of from ten grains to half a drachm in the twenty-four hours.

Medical School of Kentucky.—The Medical Department of the Transylvania University is in a condition which must be gratifying to every friend of science. There are lectures given during the winter, on Anatomy and Surgery, by Dr. Dudley ; on the Institutes and Clinical Practice, by Dr. Caldwell ; on the Theory and Practice, by Dr. Cooke ; on Obstetrics and the Diseases of women and children, by Dr. Richardson ; on Materia Medica, by Dr. Short ; and on Chemistry, by Dr. Yandell. The class, the last season, was as follows : — From Kentucky, 62—Tennessee, 41—Georgia, 22—South Carolina, 21—Alabama, 21—Virginia, 14—Mississippi, 12—North Carolina, 11—Missouri, 2—Indiana, 2—Arkansas Territory, 2—Louisiana, 1—France, 1—Ireland, 1.—Total, 213. The Professors have determined to give full courses, in their respective branches, during the ensuing summer, so that there may be no long interval of Medical Instruction at the University.

Monthly Notice of New Publications.

The Cyclopedia of Practical Medicine. Edited by JOHN FORBES, M.D. F.R.S., Physician to the Chichester Infirmary, &c.; ALEXANDER TWEEDIE, M.D., Physician to the London Fever Hospital, &c.; and JOHN CONOLLY, M.D., Late Professor of Medicine in the London University, &c. Published in Monthly Parts. Part I. for January, 1832.

WE promised last week a more detailed notice of the first number of the Cyclopedia of Practical Medicine, published in London the first of January last, and to be republished at Philadelphia. This No. contains 112 royal octavo pages, and will, we understand, form about a twentieth part of the work. Among the contributors we find the names of Drs. Lee, Elliottson, Marshall Hall, Clark, Conolly, and many others who are favorably known both as writers and practical men. The present No. contains twenty-one articles, commencing with Abdomen (Exploration of), and ending with Aorta (Aneurism of). Of some of these it is our present purpose to present a brief notice.

ACUPUNCTURE, by Dr. Elliottson. Dr. E. observes that this forms an example of a good remedy introduced into practice upon a groundless hypothesis. The immediate purpose which it is supposed to answer in Japan and China, is to allow of the escape of a subtle and acrid vapor, on the confinement of which various forms of disease are imagined to depend. The remedy was made known in Europe by Koempfer, a Dutch physician, who had witnessed its operation in Japan, as early as the year 1691; but the first European trials of it were made by Dr. Berlioz, in Paris, in 1810. The following extracts on the forms of diseases to which this remedy is adapted, and on the mode of employing it, possess some interest.

"The diseases in which the power of acupuncture is well established are, pain and spasm, not dependent upon inflammation or organic disease, rheumatism of the nerves, (rheumatic neuralgia,) as distinguished from that chronic form which is generally limited to a small extent of nerve, lasts a great length of time, and is independent of cold, the invariable cause of rheumatism. In rheumatism of the fleshy parts, in simple pain of any spot, and in spasmodic and convulsive pain of various parts, whether local or migratory, acupuncture is decidedly beneficial, provided inflammation be not the cause."

"The operation may be performed in muscular, aponeurotic, and tendinous parts; and the needle introduced to the depth of from the fourth of an inch to two inches, according to the thickness of the muscles. We should not advise it to be passed into viscera, articulations, or blood-vessels. In general no fluid escapes when the needle is removed ; but now and then a small drop of blood follows ; and in one case which came under our own observation, when the needle had been introduced into the pectoral muscle, blood spirted forth, but it was immediately restrained by gentle pressure—an occurrence in every respect similar to what once happened in the practice of M. Bretonneau."

Some experiments performed on animals by the individual last named, go to show that the stimulus of acupuncture applied to the heart is capable of exciting it to renewed action in cases where animation has been suspended from asphyxia. Supposing these experiments to be accurately reported, however, they throw little light on the effect of the operation when employed for the cure of rheumatic affections. In the former case a stimulus is applied to a peculiarly irritable muscle, producing at first a spasmodic action, and subsequently a renewal of its ordinary functions. In the latter, the effect, so far as can be judged, seems to be directly sedative, causing parts previously possessed of exquisite sensibility, to pass at once into the opposite state. The modus operandi, however, of the operation is peculiarly obscure ; and the difficulty of assigning any rational explanation, or rather the absence of anything analogous in the operation of other remedies, has led some to express an unwarrantable scepticism in regard to the facts. In regard to the different explanations which have been resorted to, Dr. E. expresses himself in the following terms.

" It is not accounted for by fear or confidence ; since those who care nothing about being acupunctured, and those who smile at their medical attendant for proposing such a remedy, derive the same benefit, if their case is suitable, as those who are alarmed and those who submit to it with faith. Neither is it explained on the principle of counter-irritation ; since the same relief is experienced whether pain be occasioned by the insertion of the needle or not. Galvanism, likewise, fails to explain it ; because, although the needle frequently becomes oxidated, and affords galvanic phenomena while in the body, these phenomena bear no proportion to the relief afforded by the operation ; besides that they are observed when acupuncture is practised upon a healthy person, and do not take place when needles of gold or silver are employed, which, however, are equally efficacious with needles of steel."

Age. This article, of about nine pages, is an interesting and highly finished treatise on the moral and physical changes which take place in advanced life. The author, Dr. Roget, is mentioned as Secretary to the Royal Society. The whole of this monograph marks a vigorous intellect, and philosophic habits of thought and reasoning. The insidious approaches of age, its effects on the osseous system, on the fluid secretions, on the skin and hair, on the organs of sight and hearing, on the circulation, on the absorbent system, on the muscles, on the brain and nerves, on the sensibility and temperature, and on the mental faculties, are all described in clear, forcible, and animated language. The specific diseases of old age are then considered, particularly the climacteric disease as described by Sir Henry Halford ; dyspepsia with its various aggravations ; failure of the urinary functions, palsy and apoplexy. The following passage on the dyspepsia of old age, describes a train of phenomena, which no one whose attention has been called to this subject can fail to have noticed.

> " Dyspepsia, in all its varieties, is among the earliest as well as most common of the diseases of advanced life ; and its prevalence at this period may be traced to many causes, of which the operation is sufficiently obvious. The principal of these is, undoubtedly, the gradual decline of irritability and of muscular power which pervades the whole system, and in which the fibres of the stomach and intestines must of course participate. It often happens, that while the powers of assimilation have diminished, the appetite still continues good ; and, consequently, more food is taken than can be converted into healthy nutriment. That portion which is imperfectly digested being retained, tends, by its presence and accumulation, still further to impede the due performance of this function. The distention of the stomach and bowels from flatus, and their continued irritation from containing acid or acrid materials, lay the foundation of a vitiated habit, and of permanent injury to the tone of the organs. Another cause of imperfect digestion may be pointed out in the loss of the teeth, and the consequent defective mastication of the food. The mischief is often aggravated by the sudden discontinuance of the salutary exercise which was formerly taken ; and by an indulgence in the repose which, after a life of exertion, is almost claimed as the privilege of age."

This disposition of the appetite to survive the digestive powers is among the embarrassing circumstances by which the practitioner is met in his attempts to enforce a due regulation of the diet in patients of this class. The desire for solid food often continues unabated, although the articles taken into the stomach are found, after causing inconvenience and distress through the whole canal, to pass from the rectum undigested and unchanged. To what, it may be asked, is it owing that a correspondence which exists at every other period of life between the powers of the stomach, in health, and its demand, is in old age no longer maintained ; and why does not the same instinct which leads the infant to seek the mother's milk as its natural and appropriate nutriment, direct the old man to the choice of an aliment equally adapted to his impaired powers ? The effect of luxurious habits, in accelerating the infirmities of age, and impairing the powers of the system, must doubtless be resorted to for the explanation of this apparent anomaly. Were all our habits through life conformed as much as those of infancy to the design and intention of nature, we might then with better reason hope in age, as in youth, that her obvious dictates would furnish us an unerring and ample guide. But appetite, like conscience, when it has too often been tampered with, will learn, from ill treatment, the lesson of ill faith ; and thus the excesses of youth become too surely the whips and scourges of declining age.

ALTERATIVES. An article on this subject, by Dr. Conolly, contains an enumeration of most of the articles which are commonly viewed in this light. We refer to it now, however, for the sake of a single remark, which has often occurred to ourselves, and which suggests a course of inquiry, destined, as we hope, at no distant period, to be pursued by the profession. Speaking of the medicinal virtues of guaiacum, Dr. C. observes,—

> "We have ourselves little to say of its efficacy when used alone ; and we so often remark, when doubt has been once cast on the operation of a medicine, and the effect is carefully looked for, that it fails to be observed, as much to wish that not only the guaiacum, but many or most of the articles in the Materia Medica, were submitted to new and careful clinical experiments. No part of medicine is in more need of complete reform than that which relates to the actual effect of medicines daily and hourly employed."

We conclude by again directing the attention of our readers to the plan of this work, which will, we think, form a condensed library of practical medicine in a convenient form and at a reasonable price. The future numbers may be noticed as they appear.

A Treatise on Dislocations and Fractures of the Joints. By Sir ASTLEY COOPER, Bart., F.R.S., Sergeant-Surgeon to the King, &c. &c. Boston. pp. 516.

A NEW American, from the sixth London Edition of this valuable classic, is just from the press of Lilly & Wait of this city. The English edition, of which this is a reprint, contains several important additions, by the illustrious author ; and the different and especially most obscure species of fracture and dislocation, with the modes of reducing them, are illustrated by 34 very full and satisfactory copperplate engravings. All these additions and plates are given in the present volume, together with Dr. Godman's notes and references. Indeed, so perfect a work is here presented to the American practitioner, that the possession of it will be scarcely less a comfort to him, than it were to live within call of Sir Astley himself.

The Library of Entertaining Knowledge, published under the direction of the Society for the Diffusion of Useful Knowledge. Lilly & Wait. Boston. 1831.

THE winter is past, but the evenings are yet long, and we do the reader a favor when we call his attention to the work that bears the above title. It is not saying too much of these books, to rank their possession and use among the means every family should adopt to attain that greatest of all safeguards to the morals of its younger members,—*an agreeable home.* The mind of the young must be entertained. If a parent does not know this fact and act upon it, there are but slender hopes for the prosperity or happiness of his children. The mind of the young *will* be entertained. If this entertainment is not found at home, it will be sought abroad ; and this is the first step to the ruin of a young man. It is the great happiness of the present age that it abounds in sources of attractive and innocent amusement that may be introduced into the family circle. Most of these have the additional advantage of conveying instruction in agreeable modes ; and of all which offer to the young, at the same time, both entertainment and knowledge, we know of none better suited to this object than that which we are now particularly noticing : its text is in perfect keeping with its title, and fully sustains the expectations to which that must naturally give rise.

Eleven volumes have been published, chiefly on subjects of natural and political history, biography, mechanics, &c. all very fully and handsomely illustrated by numerous cuts. We would refer, as particularly interesting, to the volumes on insect architecture, and the architecture of birds ; but as it is our intention, in future numbers, to make the reader better acquainted with the work, especially that part of it which relates to natural history, we shall content ourselves at present with this general notice.

Whole number of deaths in Boston for the week ending March 24, 30. Males, 14—Females, 16.

Of consumption, 3—burn, 2—dropsy on the brain, 2—convulsions, 3—scarlet fever, 5—scalded, 1—typhous fever, 1—hooping cough, 1—old age, 1—suffocated, 1—worms, 1—dropsy, 2—suicide, 1—mortification, 1—lung fever, 1—inflammation on the lungs, 1—unknown, 3.

ADVERTISEMENTS.

HISTORY OF THE CHOLERA MORBUS.

Just published by CARTER & HENDEE, a Medical and Topographical History of the Cholera Morbus, including the mode of Prevention and Treatment, by Scouttetten, adjunct Professor at the School of Medicine at Strasburg, member of the Royal Academy at Metz, &c. &c., with a Report read at the Royal Academy of Medicine at Paris, Sept. 17, 1831. Translated from the French, by A. Sidney Doane, A.M., M.D. m14

REPORT OF THE ROYAL ACADEMY OF MEDICINE to the Minister of the Interior, upon the Cholera Morbus, published by order of the French Government. Translated from the French by John W. Sterling, M.D. Just received by CARTER & HENDEE. March 14.

A DICTIONARY OF MEDICINE, designed for popular use. By Alexander Macaulay, M.D. Second English edition. Just received by CARTER & HENDEE. March 14.

A Treatise on the Structure, Functions, and Diseases of the Human Sympathetic Nerve. Illustrated with Plates. By John Fred. Solstein. Translated from the Latin, with Notes, by Joseph Pancoast, M.D. Just received by CARTER & HENDEE. March 14.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY CLAPP AND HULL,

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THE
BOSTON MEDICAL AND SURGICAL
JOURNAL.

VOL. VI.] WEDNESDAY, APRIL 4, 1832. [NO. 8.

FRACTURE OF THE SKULL.

A Case of Comminuted Fracture of the Skull, with loss of Brain and Fungus Cerebri. By Abraham Adams, M.D., of Cynthiana, Kentucky.

On the 6th of September I was requested to visit a boy, eight miles distant, who had received a kick on the head from a horse. The messenger had not seen the boy, and knew nothing about the extent of the injury ; but had been informed that the skull was not broken, and therefore I did not take trepanning instruments with me.

On my arrival I found the boy, who is about nine years of age, very restless, writhing and twisting continually like a wounded worm. He could not be held still—his eyes were permanently open, his pupils dilated, his pulse irregular, his respiration somewhat labored. On removing the coagulum of blood which filled the depression in his skull, I ascertained that there was a comminuted fracture, with a rupture of the membranes, some of the brain having been discharged through the rupture, and every violent exertion causing a continuation of the discharge. I immediately despatched a messenger for trepanning instruments. In the mean time, I placed my hand over the orifice in the membranes, to prevent, when the patient made such exertion, any further loss of brain.

The boy was not seen at the instant the blow was inflicted. The stroke was heard by some persons who were near ; looking in the direction, they saw the boy falling, and the animal with the appearance of having just kicked. From the seat of the injury the boy must have been stooping forward ; he had also an extensive contusion on his hip and on the left arm, near the elbow. The presumption is that in leaning forward, (which would bring the elbow to the hip, and the top of the head in a situation to receive the blow,) the animal kicked with both feet ; that one struck the head, and the other the contused arm and hip. The mare no doubt kicked with her utmost force, as she was at the time teased by a stallion.

In about two and a half hours, having procured instruments, I proceeded to the operation. I made a crucial incision in the scalp, turned up the flaps, and removed all the detached portions of bone. The fracture was seated in the left parietal bone, extending in length about two and a half inches, near the middle of the bone and nearly at right angles with the sagittal suture. A line drawn from one ear to the other would pass over it a little obliquely.

The removed portions of the bone, when placed together, formed an irregularly shaped figure. In the centre it was about one and three-fourth inches in width; at the extremity next the sagittal suture, not more than three-fourths of an inch, and of an angular shape; at the opposite extremity, it was one and a fourth of an inch in width, of an irregular circular form. At this extremity the plates of the bone were separated, and five spiculæ of the under plate driven through the membranes into the substance of the brain. I saw one partly buried in the brain, which led me to seek for the four that were entirely concealed from view. I introduced my finger, felt the spicula, and making my finger a director, followed it with the forceps, seized the bone, and extracted it. One of the four removed in this way was three-fourths of an inch in length, rather more than half of an inch in width, having irregularly serrated edges. The rest were of smaller dimensions. From the extremity last mentioned a fissure extended into the occipital bone, the extent of which appeared considerable. I did not trace it far, as no necessity existed for it.

About half an inch from this extremity, there was a depressed portion of bone of a semicircular form, not more than half an inch in its widest diameter, separated from the main fracture by a space of sound bone, not more than half an inch in width, connected with and situated entirely on that side of the fissure, before spoken of, next the occipital. From the situation of this depressed portion, it was impossible to apply the elevator so as to raise it, and as the scalp was lacerated over the depression, I determined to remove it with the trephine. How this small portion was depressed, separated from the other, I did not entirely satisfy myself; the most probable conjecture to me was that it had been done by the heel of the horse's foot, or some irregularity in the hoof, the animal being unshod.

The other fractured portions were so completely detached, that there was but little difficulty in removing them, except a portion near the middle of the fracture, in its widest part. This portion was divided equally in a longitudinal direction. The middle edges were driven in, and very tightly wedged together; and the outer edges being irregular, and the under plate wider than the upper, rendered its removal very difficult. I however succeeded, by clipping off the irregular projections in the upper plate, at several points, and then elevating the centre. From appearances, corroborated by the statements of those who had been with the boy from the beginning, it was evident that a considerable quantity of blood had been lost. In making my incisions I divided a branch of the occipital artery, which I considered as a fortunate circumstance, and permitted it to bleed, until from the quantity lost I thought it prudent to check it by pressure. During the operation there were several ounces of blood lost from branches of the middle artery of the dura mater, that were ruptured, their impression on the removed bone being very distinct.

After having removed all the detached bone, and the coagula that formed in the depression, I brought together the edges of the divided scalp by a few sutures, leaving the part entirely open from which the bone had been removed. During the operation he gave no symptoms of suffering except when I made the incision in the scalp ; the force of several men was then necessary to hold him.

I placed the patient in bed, having his head elevated ; he lay quiet during my stay that evening, which was not more than an hour after I had him removed from the table to the bed. The restlessness and contortions of his body which had been noticed, no longer continued. He seemed disposed to sleep. His pulse and respiration were not much improved. The boy slept some during the fore-part of the night ; but in the latter part fever having supervened, he was bled to eight ounces.

On the morning of the 7th I saw him at 10 o'clock, and finding his skin hot, and his pulse active, I took nine or ten ounces of blood ; gave him pulvis jalapæ ; directed it to be repeated every three hours, until three portions had been given. If that did not operate, then to give oleum ricini, and if in two hours no operation was effected, to administer an injection. The boy had not yet spoken. Yet he seemed to understand the queries put to him, though he did not speak. My directions were strictly followed, without producing the desired effect. The patient became so extremely restless and unmanageable in the latter part of the night, that a messenger was despatched for me. On the morning of the 8th, I arrived at an early hour, and found my little patient very untractable. Unless held, he would roll over his bed, and make efforts to get up. The injections had been retained. I immediately attempted the introduction of a suppository of soap, which on account of the spasmodic contraction of the sphincter was not easily effected. In a few moments the soap was discharged, followed by a copious evacuation of fæcal matter.

As no urine was discharged, and his restlessness continued, I was led to examine his bladder, which was found to be greatly distended. While reflecting on the best mode to effect a discharge (not having a catheter with me), the boy made an effort to rise, saying " let me get up." We then raised him to the floor. A profuse discharge of urine followed. He now became quite composed, and answered rationally questions put to him.

A continuation of the cathartic operation was directed. The suppository of soap was found necessary to effect a discharge, for the five succeeding days. After that time it was no longer used, but a cathartic was daily administered, often repeated several times in the day, until the end of the fourth week. From this period to the sixth week, a cathartic every other day was sufficient ; after which no cathartic medicine was administered. During the whole course of the treatment, calomel was administered about once a week, in doses of about ten grs. ; the other cathartics used were pulvis jalapæ, pulvis rhei, sulphas magnesiæ, and oleum ricini ; these were varied, repeated, or alternated, according to circumstances ; restricting him at the same time to the lowest diet.

In the first instance no other application was made to the wound, than a dressing of lint, confined by proper bandaging. The dressing was soon discovered to be stained with bloody serum, and before the morning of the 7th, a large quantity had been discharged. It became necessary frequently to change the pillow, and the piece of cotton cloth that was used to absorb the discharge. This discharge continued for five or six days, though after the third it was much diminished in quantity. On the fourth day the dressing and lint were removed, when the wound made by the incisions in the scalp was found to be suppurating, and serum a little tinged with blood discharged from the part injured by the blow. I renewed the dressings daily for thirty days; after the third dressing I removed the sutures that had not been discharged by the suppurating process, and applied strips of adhesive plaister, that were daily renewed.

On the morning of the 11th the patient became more uneasy and restless than he had been for several days. In a short time he had violent convulsions, which continued for some hours. On inquiry I very satisfactorily ascertained the cause of these convulsions. I had directed them to make a cap of light materials, very large, (to prevent pressure on the wound,) to keep the boy from disturbing the other dressings, for he had from the beginning a constant disposition to tear them from his head with his right hand, (his left being paralytic from the receipt of the injury.) This cap, in opposition to my instructions, was made of coarse domestic linen, and so small as to press tightly on the wound. It was put on in the morning, and in a very short time the boy became restless, and could not be kept quiet; the convulsions followed, and were arrested by the removal of the pressure produced by the cap and bandages, the struggles of the boy having deranged them so much that they were entirely removed by one of the attendants.

The case went on well from this period, nothing remarkable occurring until, as I had anticipated, on the 11th day fungus cerebri made its appearance. I at once determined to adopt the treatment I had heard recommended by Professor Dudley. I enveloped a piece of dry sponge in a strip of gause, and by means of the bandaging confined it to the part. Having early made this application, the fungus was prevented from becoming large, and in a few days it entirely disappeared.

In the seventh week from the time the injury was received, I visited the boy for the last time. The wound was then cicatrized, except a very small portion, a mere point.

Nov. 14th. The boy in company with his mother came to town today, on horseback. The wound is completely healed. He has perfect use of the arm that had been paralysed. His mental faculties seemed not in any degree impaired. His health is perfect. He has been several times to mill, riding on a bag, a distance of five or six miles.

Transylvania Medical Journal.

LOCAL APPLICATION OF CAMPHOR.

To the Editor of the London Medical Gazette.

Sir,—My latter communications to you have contained some striking instances of the powerful effects which the local application of camphor produces. I have reason to suppose that even the action of the heart is under the influence of its power, and adduce the following case in support of this opinion.

A child, suffering from some peculiar affection of the brain, sunk into that state of torpor which is generally the result of effusion into the cavities. The following was the state of the child when I determined to try the effects of camphor on the heart. It was lying perfectly senseless, with a slight flush in the countenance, was squinting, the pupils dilated, the pulse beating about 64 in the minute, intermitting every fourth stroke. I enveloped the whole chest, anteriorly and posteriorly, with a piece of flannel, soaked in the following camphorated solution.

Gum Camphor, ℥iss.
Sp. Vin. Rect. ℥iij. M. f. solut.

In less than five minutes, the child, who had lain perfectly senseless and quiet for some hours, became pale, moaned, and appeared restless and distressed, the pulse beating so rapidly that it was almost impossible to count it. These appearances increasing, I removed the flannel from the chest, and the child in a few hours had returned to the state in which it was previous to the application of the camphor, and died in about twenty-four hours. It was not with any expectation of benefiting my little patient that the experiment was made, but his hopeless state, in my mind, justified the trial. It is not my intention to suggest any peculiar conditions of the system, or of the heart itself, in which this application might be useful, but I can imagine many, and trust that my hopes may not be deceived, when the opinion is again put to the test of experiment.

I have lately used the same local application to the perineum in a case of gonorrhœa dormientium. Previous disease had induced excessive debility, which every paroxysm of this attack aggravated considerably. Nearly three weeks have elapsed since the application was had recourse to, and no paroxysm has actually occurred since.

From ascertaining, by repeated experiments, the great value of this application, and from having successfully applied it in cases that might be said to be somewhat analogous to cholera, I would venture, with some degree of confidence, to suggest its use in that disease. If a case occurred in my own practice, I should, without hesitation, envelope the whole abdomen, from the ensiform cartilage to the pubis, and the corresponding portion of the back, in flannel, soaked in the solution, and I should do it in great expectation of some advantage following; for it appears to me that it is only in cases where the nervous power is absolutely deficient, (not in those in which it is in a state of diseased action,) that the application could in any way be prejudicial. I am, Sir,

Your obedient servant,

Kensington, *Dec.* 14*th*, 1831. HENRY GEORGE.

Mrs. G., a short, stout woman, was delivered on Thursday, the 15th December, 1831, of her fourth child, after somewhat more than her usual suffering upon that occasion. She went on well until Saturday the 17th, when I found her complaining of pain in the lower part of the abdomen, somewhat wandering in its situation, and although constant in some degree, yet imitating after-pains. Pulse rather more frequent than was pleasant; bowels had been moved; milk secreted; lochia lessening; tongue tolerably clean; some pain in the head, but only noticed upon being questioned about it. These symptoms were ushered in by rigors during the night before; they were, however, far from alarming. Applied fomentations, and gave a diaphoretic mixture. In about six or seven hours I visited her again, and found all the symptoms materially increased; pain in the abdomen acute; abdomen swollen, and exquisitely tender; pulse greatly accelerated; skin intensely hot; lochial discharge totally ceased; considerable pain in the head, with intolerance of light and extreme restlessness. I drew blood until an impression was made upon the pulse; directed five grains of calomel to be given every hour, of which she took seven doses. I saw her again in two hours, and found the symptoms by no means abated—increased they could not well be. I then applied a large flannel embued with a strong solution of camphor, as recommended by Mr. George. Upon visiting her early the next morning (Sunday, 18th), I learned that the pain had ceased almost immediately upon the above application. Pulse still frequent, but the febrile and inflammatory symptoms lessened. No stool: to take ℥ss. castor oil every two hours until it operates. In about four hours from this visit, I was sent for hastily; she was thought to be dying. I found she had had two or three stools, and had been out of bed to pass them, and thus induced syncope: she had taken a few spoonfuls of mutton broth, contrary to my wish, and nausea and vomiting ensued; pain in the region of the uterus returning. Repeated the solution of camphor; gave her tr. Opii gtt. xv. sp. Ammon. arom. gtt. xxx. stat. In the evening the sickness was unabated; the camphoretted spirits had not produced such prompt and decided relief as upon its first application, but still the pain was not so great; lochial discharge was returning, and pulse more tranquil. To take the effervescing mixture.

Monday, 19th, morning.—Pain, and tenderness, and swelling of the abdomen, have left her; bowels moved twice in the night; stools copious, offensive, and dark-colored; passed urine freely, which she had done all the time; milk freely secreted; lochial discharge freely and fully re-established. Continue alkaline mixture.

Evening.—The only complaint she makes is of soreness of the tongue and inside of the lips; bowels again moved twice; no mercurial fœtor nor tenderness of the gums.

From this time she went on progressively improving, with the exception of a little faintness a few days afterwards, arising from her imprudent exertion in leaving her bed to evacuate her bowels, but from which she very soon rallied, and is now as well as usual in the same time after her lyings-in. C. M. Ashwin.

PROXIMATE CAUSE OF ICTERUS.

Read before the Boston Society for Medical Improvement, by E. G. Davis, M.D., *and communicated for the Boston Medical and Surgical Journal by the Publishing Committee.*

What is the proximate cause of jaundice? We are commonly told that this disease is immediately produced by obstruction to the course of the bile, which, in consequence, is reabsorbed into the blood, and thence thrown upon the skin and the kidneys; and we are referred to various causes by which it is supposed this obstruction may be produced, as the remote causes of the disease. For one, I am inclined to doubt whether obstruction to the course of the bile be, in fact, the proximate cause of this disease. The obvious symptoms which inspire the suspicion of jaundice, both in the physician and the common observer, are the unusual yellow color of the conjunctiva, of the eyes, of the skin, and of the nails. On farther inquiry, it is generally found that the urine has a deeper color than usual, verging from a yellow to a red,—that the stools, on the contrary, are pale, and the bowels somewhat constipated; these last symptoms not always accompanying the others, and therefore not being viewed as essential to the disease. The natural inference is, that bile is now secreted by the kidneys with the urine, and also transudes through the exhalant or extreme vessels of the surface, thus pursuing two unusual channels. It is also evident, when the two last symptoms are present, that the bile does not pass into the alimentary canal as is usually the case, and we all agree in referring the constipation to the fact that the intestines are deprived of their usual stimulus. So far, there is no point on which any reasonable doubt can be entertained, nothing in which all will not unite in opinion. But in explaining the manner in which this transfer of function to distant and unconnected organs takes place, an hypothesis is resorted to, which, to say the least, the circumstances do not render necessary. It is said that the bile is secreted by the liver; but by mechanical or other causes, being prevented from flowing through the ducts into the intestines, is carried into the circulation and thence separated by the renual and cutaneous vessels. If in this explanation is implied the actual absorption of the bile and its subsequent secretion, the process seems to be unnecessarily complicated, since neither is required to explain the phenomena. It may be thought, however, that these processes are not in truth an absorption and secretion; that the bile is taken up by the vessels, mixed with the blood without change of properties and without becoming an homogeneous fluid with it; so that its subsequent separation implies little more than a mechanical division. Waving the question whether this explanation is in accordance with the laws which usually regulate the animal economy, we may inquire how it happens that this loose combination of blood and bile should never have been made evident by ocular demonstration: for surely if such a combination took place, the blood drawn from any part of the body, from the veins, for instance, must afford indubitable evidence of the fact. Such evidence, however, is not to be obtained; and it may well be doubted whether bile, as such, ever exists in the vessels in a state of mixture with the circulating fluid.

In the absence, therefore, of direct proof, we are not compelled, on the ground of analogy, to believe that the liver secretes the bile as usual in cases of jaundice. There are also very considerable difficulties in comprehending how, if the secretion does take place, the fluid is prevented from taking its usual course. The different modes in which this obstruction is supposed to happen, form, in fact, the groundwork of the different species of "icterus," and by considering these with reference to their proximate causes, we shall be better enabled to estimate the nature and the amount of the difficulties alluded to.

1. The first of these causes, and that which constitutes the "first species"

of Dr. Good, is the viscidity of the bile itself, by which it is prevented from flowing freely through the biliary ducts. It is not easy to understand how a substance can be secreted by the liver in a state too viscid to pass through its excernent vessels; or how in this state it can well be taken up by the absorbents and conveyed into the blood. It is easy, says Good, to conceive, that the bile may become inspissated from various causes. True; that it may so when prevented from flowing through the ducts, is easy to understand; but how the inspissation occurs, as the primary fact, still remains to be determined. It is observed, too, that when the disease has existed in this form and has just been removed, the bile expelled both by the mouth and the anus, is found very tenacious and high-colored; an interesting fact, but by no means unequivocal in its bearing on the question of the pathology of the disease. Indeed, if the bile were obstructed by its viscidity, it would be natural to expect that its character in this respect must have changed before it could pass at all through the biliary passages, and its appearance when expelled could be no criterion, whether it had been detained from this cause or from any other.

2. The second kind of obstruction to the passage of the bile is that produced by the formation of gallstones and their passage through the hepatic duct and ductus communis into the intestines. That an obstruction may and often does take place from this cause, there can be no doubt; and under these circumstances the bile must be prevented from passing into the intestines, at least so long as the gallstone is lodged in the ductus communis. Accordingly we find that during the passage of one of these calculi, the dejections lose their usual color, becoming white or clay-colored. In a case in which the obstruction in this part of the passage continued for an unusual period, as for several days, it might well happen that the bile might be reabsorbed and appear as a secretion on the skin and in the urine. That this is not ordinarily the case is evident from the fact that neither yellowness of the skin nor high-colored urine are among the usual symptoms of chololithus, which, therefore, cannot with propriety be regarded as one of the causes of jaundice, although some of the symptoms of the latter disease are its usual concomitants.

3. The third cause of obstruction of the biliary ducts recognised by Good, is a spasmodic stricture in their course induced by acrimonious ingesta, hysteria, or violent passion; and accompanied beside the other symptoms of jaundice, with great pain and tenderness in the hypogastrium. It is perhaps a bold measure to deny the existence of a disease so accurately defined and so minutely described; but the notion of a tonic constrictive spasm in organs constituted as are the ducts in question, is one which, without proof and advanced simply as an hypothesis, is calculated to inspire considerable scepticism. That the symptoms described really exist in combination, may be admitted; but there is nothing in this combination which goes to prove the occurrence of spasm, beyond what happens in other cases of jaundice, if we except the single circumstance of pain; and this is amply accounted for in those cases in which the disease arises from acrimonious ingesta, flatulence, or repelled gout, which are described as the usual causes, without having any re-

course to a distinct explanation. The pain, too, is usually a transitory symptom, and is relieved by evacuations, while the others may continue for days or even weeks; and it certainly cannot be imagined that during all this period the bile is prevented from pursuing its proper course by a spasm of the ducts. Indeed, as we have said, no fact analogous to this is known to occur in any part of the system. Among the various diseases to which the glandular system is subject, a stoppage of its excretory passages by spasm is not known to be one. We know of nothing like spasm in the renal, urinary, salivary, or lachrymal passages, and where obstruction occurs in either, we seem justified, by the absence of muscular structure, in attributing it to a different cause.

4. In icteric jaundice, the fourth species, our author experiences an evident embarrassment in making the pathology of the species conform to that of the genus. In this, the seat of the disease is placed in the organ itself; and the bile is said to be obstructed by a derangement of the liver by scirrhus or otherwise; but it is not very clearly explained how such a derangement can cause any impediment to the flow of the bile through its own ducts.

5. In the fifth and last species, or icterus infantum, the bile is said to be obstructed by viscid meconium, which prevents it from flowing from the duct into the duodenum. It is no small objection to this mode of accounting for infantile jaundice, that it supposes the meconium to be in a state very different from that in which we ever observe it; one, namely, in which it can serve the purpose of a plug to the biliary ducts, and to occupy a limited portion of the intestine in which alone it could exert this influence. It is still more against this view of the subject, that although the meconium may be, and in fact always is, in favorable cases, removed from the bowels within a few hours, the symptoms of the disease do not usually disappear on the production of this effect, and will sometimes continue for several weeks, so that the old rule of "sublata causa tollitur effectus," is strangely violated.

There are two general objections, one of a positive and the other of a negative character, to the theory that obstruction of the bile is the proximate cause of jaundice. The first is, the large proportion of cases in which relief is obtained, and the means by which this object is effected. If the ductus communis were really the subject of tonic spasm; if the bile could really become so viscid as not to pass through the usual passages, and to present an impassable barrier to the preceding secretion; if the meconium could gain admission into the duct, and there act the part of a valve to prevent the egress of a particle of bile which might prepare a passage for the rest, we certainly should expect to find, in these cases, some serious commotion of the system, and one not easily appeased. Would it be likely that, the disease occurring in this manner, ninety out of an hundred cases should terminate without producing more than a temporary inconvenience? That scarce a case should be fatal, and that the remedial means required should be simply a cathartic, an emetic, or a course of tonic treatment; that the disease should exhibit no perceptible crisis, no sudden change, but should come on and again disappear gradually and by imperceptible gradations? That it should seldom be accompanied with severe pain, and almost never fatal? Certainly this combination of facts, when viewed in connection with the common theory, if not absolutely inexplicable, is among the most remarkable which the science presents.

But, secondly, there is no direct proof derived from examination, that the obstruction above mentioned is the proximate cause of jaundice. Indeed the disease, when idiopathic, is so seldom fatal, as to have afforded very limited means of comparing the post-mortem appearances with the previous symptoms. The only species, indeed, which is said to be frequently fatal, is that in which the obstruction exists in the liver itself, and we have already mentioned the difficulty of reconciling this species with the general description of the disease. We have on record, however, some cases terminating fatally, in which jaundice, if not the only disease, was the prominent and permanent symptom, in which the liver and ducts were subjected to a careful examination; and the evidence derived from these is the more valuable, since they are recorded as exceptions to the general rule, and not as furnishing any argument against its correctness. These cases, seven in number, are contained in the Archiv. G. de Med., from which they were transferred to the Boston Journal of May 31, 1831. In all, the yellowness of the skin is mentioned as very remarkable; and in all the structure of the organ was more or less impaired; but in one only did it appear that there existed any obstruction in the ducts.

Is it not, then, a more simple mode of accounting for this disease, to suppose that the bile, instead of being obstructed in its course, is actually not secreted by the liver in sufficient amount, and that other organs, in consequence, assume for the time a vicarious function. It is certainly not difficult to conceive of more than one state of the organ in which its function may be in a greater or less degree impaired, and that these may correspond to the different modifications of which the disease is susceptible. If yellowness of the skin and eyes, high-colored urine, and pale evacuations, be essential to the disease, would not all these arise from any cause preventing the secretion taking place, from the liver, and from a vicarious function being assumed by the kidney and the cutaneous exhalants. It may be urged, in reply, that such a function is foreign to these organs, and that to suppose them capable of separating this fluid from the blood is an unwarrantable assumption. But it is to be remembered that this difficulty, which stands alone by the present supposition, is, on the other, superadded to the previous hypothesis that the bile is absorbed into the circulating system. Unless, therefore, the two processes are more easily conceived than one, there seems no advantage in this respect to be conceded to the common theory.

Again, if to the common symptoms of the disease is frequently added nausea, languor, and uneasiness at the stomach; a combination which constitutes the first species or icterus cholœus; if in this species there is restlessness, dislike to exertion, and loss of appetite; if it occurs at the close of summer, when the system is peculiarly debilitated by heat; and if, lastly, there is little or no pain accompanying these symptoms; may they not with some probability be attributed to a torpid state of the organ in which, for want of vital energy, its usual function is suspended, although the blood is loaded with a principle which must be eliminated in order that the processes important to life may go on without interruption.

If, again, the symptoms are such as to indicate a more acute affection of the organ ; if there exist severe pain in the hepatic region, extending thence to the shoulder, with distension, sense of fulness and tenderness to pressure ; is there not reason to suppose that some inflammatory action of the organ has occurred, and that a diminished secretion of its usual fluid has been the immediate result ? This explanation will be rendered still more probable if the preceding remote causes have been such as to check the due action of the extreme vessels or to impede the digestion ; and thus cold applied to the extremities, or indigestible food, may very naturally produce the disease under this form.

In that form which is termed hepatic jaundice, and which has been ascertained to be generally connected with chronic inflammation or scirrhus of the organ ; in which the disease exists without pain, and is often one of the train of evils consequent on long-continued excess, high living, or residence in hot climates ; in this the proximate cause of the disease is so plainly pointed at, that it can hardly be mistaken by the most cursory observer. Indeed, the very remarkable expression by which it is endeavored to bring this within the generic definition of jaundice, shows that even in the opinion of its author, this definition was not properly applicable. The course of the bile, it is said, is obstructed, but rather in its secretion or separation from the body of the liver, than in its passage through the tubes.

Lastly, where icterus occurs as a disease of infancy—constituting the fifth species of Good—it is an obvious explanation of its appearance that the liver, instead of arousing at once from the dormant state in which it remained during fetal life, continues still inactive and requires some additional stimulus to rouse it to exertion. This explanation certainly seems more simple than that which would refer the disease to a cause connected with mechanical obstruction. The liver, as is well known, remains nearly quiescent in the fetus, and a very small proportion of bile is found in the meconium secreted before birth. It is the less to be wondered at, therefore, that this organ should not at once adapt itself to the altered state of the system of which it makes a part ; and should be slow in commencing that function which has but just become necessary to the animal economy. That the blood should so immediately require this elimination is indeed a singular circumstance, and well worthy of notice, but by no means more involved in one of the theories in question than in the other.

Finally, the influence of remedies and the usual period and termination of jaundice under its various forms, as they militate against the view of obstruction usually taken, are clearly in favor of that which refers it to diminished secretion. Indeed, it is extremely difficult to understand how these remedies can, in any proper sense, act as deobstruents on the ducts of the liver. Regarded with reference to their proximate effect, the remedies employed in jaundice may be reduced to four classes : nauseants, emetics, cathartics, and tonics. It were equally tedious and unprofitable to enter into a protracted consideration of the circumstances which render necessary the exhibition of these various remedies. It is sufficient to remark that if any modus operandi on the bilious system is common to all of them, it can scarce be any other than that of stimulating the organ to increased secretion. That this is the ordinary effect of articles in the three first classes, it requires no argument to show, since the fact is within the daily experience of every practitioner: and with respect to the operation of tonics, it is at least reasonable to suppose that the means by which they are enabled to give increased vigor to the digestive system is by exciting to renewed and more healthy action an organ which plays so important a part in this essential function.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, APRIL 4, 1832.

EFFECTS OF OPIUM EATING.

We took occasion not long since to remark on the singular analogy between the respective effects of opium and alcohol on the system, and to observe that it was the difference of the circumstances under which the two articles were commonly taken which produced so considerable a diversity in the symptoms resulting from them; and that as opium, when taken by an individual acted upon by external stimuli, as those of light and sound, often fails to produce somnolency, so alcohol, if swallowed under opposite circumstances, as in silence and darkness, proves directly soporific. Our opinion on this point has been recently confirmed by the result of some inquiries we have made of a person addicted to the habit of using laudanum in considerable quantity. The individual is a female forty years of age, who for some years has been in the habit of taking from half an ounce to an ounce of laudanum daily, for the sake of removing uneasy sensations apparently connected with a dyspectic state of stomach. She never experiences from its use the effect of sleepiness, nor are her hours of sleep at all affected by the very variable period at which she uses the drug. Her usual course is to take a dose a short time before each meal, and other doses at uncertain hours. Unless fortified in this manner, the stomach is so irritable as to be incapable of retaining food. The bowels are moderately, not excessively constipated, and as her habit is entirely sedentary, it is doubtful how far this circumstance is connected with the use of the drug. She is otherwise temperate in her habits.

To what extent, and in what manner, the use of opium is injurious to the animal economy, is a point which is yet undetermined, and which is the less likely to be settled, as the unhappy victims of this habit labor even more sedulously than those addicted to the use of ardent spirit, to conceal the fact from notice; while the effects being less marked, the concealment is much easier in the former case than in the latter. In fact, it not unfrequently happens that a physician attends a patient in the daily use of this indulgence, and remains entirely ignorant of its existence; while, on the other hand, the evil is of such limited extent compared with that of drunkenness, as to make it less desirable to bring it into public notice. The few statements which have been furnished us on this subject are either vague and general, as the accounts of travellers who have witnessed its effects in the East, or fanciful and exaggerated, as is the case with the Confessions of an Opium-eater. This last production, however interesting and highly wrought considered as a literary work, has too much of the marvellous and is too poetical to be consulted for sober facts. We see that attention has lately been attracted to this subject by a case which lately took place in England, the decision of which involved in some sort that of the question above alluded to. This arose out of a claim made by the representatives of a deceased nobleman in Scotland for the amount of insurance effected upon his life. The claim was resisted on the ground that the individual alluded to was an habitual opium-eater, and that this fact was not made known to the company at the time when the insurance was effected. The particulars of the case are mentioned in the thirty-fifth number of the Edinburgh Medical and Surgical Journal, and we refer our readers to that authority for its details. It is sufficient here to mention, that during the two years that intervened between the signing of the policy and the death of the Earl, his daily portion was from two to three ounces of laudanum, and that at one time the allowance per diem was not less than forty-nine grains of solid opium and an ounce of laudanum. The effect of this is somewhat variably stated by the evidence adduced on opposite sides; but the amount seems to be, that while under the influence of the drug he attended to business, saw and conversed with his friends, appeared cheerful, and exhibited no symptoms distinctly resembling intoxication: on the other hand, that his appetite became exceedingly impaired, that when he rose in the morning he was so stiff as to be unable to support himself, and that he was subject to depression and low spirits. Several physicians were examined, and some of high eminence, on the general question as to the influence of this habit on the general health; but as it happened, not one of them was able from his own experience to pronounce it prejudicial. The jury found the insurance company liable. In consequence of this decision, and apparently with a view to make up the deficiencies of his own evidence, Dr. Christison has come out in the Journal above mentioned with his views on this subject. The Doctor is unwilling to admit that the habitual use of this drug can be indulged in with entire impunity; but the facts which he adduces go to show that the injurious effects are often exceedingly slow in taking place; that when the constitution has become once inured to the poison, so that the aid of habit is fairly enlisted in defending the system, the nerves, as well as the stomach, will hold out for a wonderful period against its destructive influence. For the benefit of those who have not the opportunity of recurring to the article itself, we quote the following list of cases, which, even regarded as exceptions to a general rule, are sufficiently remarkable.

> "1. A young lady of five-and-twenty has taken it largely for fifteen years. It was first administered secretly by her nurse to keep her quiet and save trouble; and the unhappy lady was subsequently compelled to keep up the practice for her comfort. She enjoys good health. 2. A female, a patient of mine in the Infirmary, a martyr to the rheumatism, took it for ten years previous to her fortieth year in the quantity of a drachm daily of solid opium. She then gave it up. Six months afterwards she was attacked with jaundice; subsequently she was several times severely ill of rheumatism; and she died in her forty-third year of consumption. This woman, however, led a licentious life from an early period. 3. A well-known literary gentleman, who has taken laudanum with some intermissions for twenty years, and occasionally to the extent of nine or ten ounces daily, has now attained his forty-fifth year. He is spare in form, looks older than he is, but is capable of undergoing a good deal of bodily fatigue, and enjoys tolerably good health so long as he takes sufficient exercise. His allowance when I had last an opportunity of conversing with him was about nine drachms of laudanum daily. 4. A lady in this city, after drinking laudanum to excess for upwards of twenty years, died about the age of fifty. No information could be supplied of the disease of which she died. 5. A lady of the same age takes about three ounces daily, and has used it for many years. She appears to enjoy good health. 6. A lady, about sixty years of age, has taken it above twenty years, and is in good health. 7. A charwoman, who had been in the daily practice of drinking two ounces of laudanum for many years, died at the age of sixty. The gentleman who has stated this fact, does not remember what disease she died of, although he dissected the dead body. 8. An eminent literary gentleman, I am informed, has been in the habit of taking laudanum since he was fifteen; and his daily allowance has sometimes been a quart bottle (twenty-six ounces), consisting of three parts of laudanum and one of alcohol. Enormous as this dose may appear, I am assured this fact is well known to his acquaintances. He is about sixty years of age, and enjoys good health. 9. A lady of seventy, now alive, has taken about an ounce of laudanum daily for nearly forty years. She enjoys tolerable health, and every year travels great distances to visit her friends. 10. An old woman of eighty died a few years ago, at Leith, after taking about half an ounce of laudanum daily for nearly forty years; and she enjoyed tolerable health all the time."

The secret, no doubt, by which both alcohol and opium are so often rendered apparently innoxious, is to be found in their regular and systematic use, as distinguished from occasional indulgence in excessive doses. In regard to opium, this precaution is the more likely to be adopted, since an overdose is known to be attended with immediate danger; and those who acquire the habit are compelled to feel their way and increase the quantity only as the susceptibility becomes obviously diminished. The fitness for this kind of training, however, must vary in different individuals with other peculiarities of constitution; and there is little doubt but many pay with their lives the penalty of their imprudence, before the habit can properly be said to be established.

With regard to constipation, as an effect of this habit, it seems not to be more constant than the other ill effects which are attributed to its use; and it may be doubted whether in those who have become duly seasoned to its employment, this circumstance continues to constitute an inconvenience. The opium-eaters of the East are not compelled to use cathartic medicine, and in the case at least of those above mentioned, no laxatives at all appear to have been resorted to.

NEW CURE FOR CONSUMPTION.

A correspondent of the Revue Medicale strongly recommends *snails* in cases of incipient phthisis. The best mode of administering the remedy is said to be in substance, the commencing dose to be a single snail eaten raw from the shell three times in a day. The number should gradually be increased, till it reaches twenty or more daily, and then varied or continued without change, according as the stomach is found to digest them. Many patients have been capable of taking forty daily, and two carried the dose to sixty-six without inconvenience. One of these patients having been for several years subject to catarrhal complaints on slight exposure, was at length attacked with cough, febrile evacuations, purulent expectoration, and other symptoms of approaching consumption. These went on increasing in spite of every remedy; till the patient was at length induced to put himself under the care of the snail doctor. When he had carried the dose to twenty-two repeated three times daily, the symptoms exhibited a marked amelioration, and by continuing this amount for the space of fifteen days, the state of things was so far improved as to promise a speedy recovery.

THE SUNDERLAND DISCOVERY.

We alluded, a few weeks ago, to the proposition of Dr. Clanny, of Sunderland, to the British Government, to unfold a cure for the Cholera, which he had discovered, on the receipt of a sufficient compensation. The reply to the Doctor was such as he merited; and finding he could not *sell* his discovery, he has generously *given* it to the public. What it is, may be best told in the language of the London Medical Gazette.

"Every one knows," says the Editor of that Journal, "how troublesome is the purging in this complaint, and how even enemata are often speedily returned. This seems to have been the great subject of the Doctor's meditations, and constitutes the great triumph of his genius. Well can we imagine the exultation of his *heureka* when the bright idea struck him, amid his contemplations on the fundamental nature of the malady. Others had wasted their efforts in attempting to control the action of the bowels by various medicines; *he* resolved to go directly to the point—*to bung up his patients*, and fasten the plug with a bandage,—

as we wire down the cork in a bottle of ginger beer! Such, in sober seriousness, is the only proposal in Dr. Clanny's mode of treatment which has the slightest claim to novelty, and therefore we presume that it formed the subject of his correspondence with the Lords of the Council. Blind and ignorant government! not to purchase such important novelties—not to reward so great a discoverer!

PRESERVATION OF HEALTH IN THE CITY.

The ordinances of the City Government for the preservation of cleanliness and prevention of disease during the approaching summer, have been very seasonably published; and as there is a possibility that the cholera may reach us before its close, we are happy to find that these ordinances are to be rigorously enforced. In one point, they appear to us essentially deficient. It is ordained that all house offal, whether consisting of animal or vegetable substances, be taken away by the city scavengers *no less than twice in each week*, during the months June, July, August, and September. This is not often enough. It should be done during those months *every day*. We have suffered much from this delay in years past, and it has been a subject of general regret that provision should not have been made for a more frequent visit of the scavengers. In very hot weather house offal is generally offensive the second day, and always on the third; and it is to be hoped that so great an impediment to the comfort, if not to the health of the citizens, will be removed by some further act of the City Council.

Whole number of deaths in Boston for the week ending March 30, 30. Males, 11—Females, 19.

Of consumption, 5—paralysis, 1—lung fever, 3—inflammation on the lungs, 1—scarlet fever, 3—dysentery, 1—infantile, 2—typhous fever, 1—measles, 1—canker rash, 1—influenza, 1—canker, 1—croup, 2—throat distemper, 1—accidental, 1—spasms, 1—old age, 1—unknown, 3.

ADVERTISEMENTS.

HISTORY OF THE CHOLERA MORBUS.

Just published by CARTER & HENDEE, a Medical and Topographical History of the Cholera Morbus, including the mode of Prevention and Treatment, by Scouttetten, adjunct Professor at the School of Medicine at Strasburg, member of the Royal Academy at Metz, &c. &c.; with a Report read at the Royal Academy of Medicine at Paris, Sept. 17, 1831. Translated from the French, by A. Sidney Doane, A.M., M.D. m14

REPORT OF THE ROYAL ACADEMY OF MEDICINE to the Minister of the Interior, upon the Cholera Morbus, published by order of the French Government. Translated from the French by John W. Sterling, M.D. Just received by CARTER & HENDEE. March 14.

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PAROTITIS MERCURIALIS.

Observations upon the Nature and Treatment of Parotitis Mercurialis.

By George R. Morton, M.D., of Coshocton, Ohio.

In the wide range of research and discovery, which pathological science has opened to its professors, the glandular system, in its anatomical structure, its diseases, and their remediate management, has attracted a large share of the attention of medical writers, especially of the present day. The subject has been investigated with the keenest discrimination, by men whose names stand high in our esteem, and whose talents have elicited a fund of knowledge of the most practical usefulness.—The mysteries with which early pathologists have enveloped it, are fast disappearing; and a theory more consonant with its important functions has arisen, which bids fair soon to reach perfection. But great as have been the discoveries, and essential as are the alterations which these have introduced into the treatment of glandular disorders, much yet remains unknown and uninvestigated, or at best but imperfectly noticed and understood. It is thus with the disease in question. We have searched over the works on medicine, both ancient and modern, and have looked in vain for any author, whose writings would lead us to infer even the slightest acquaintance with it. If they have described, accidentally, any disease at all approximating to it, they have noticed it as a symptom sometimes consequent upon, and connected with "malignant and pestilential fevers;" and have stumbled over it, like Clio of old, without the least idea of its true character and interesting nature. None, however, have noticed it as a distinct and peculiar disease, *sui generis*, and as such deserving attention. As such, we intend to describe it; not as a *new* disease, but as one whose rare occurrence has rendered it unnoticed, notwithstanding its singular features and terrible fatality. In endeavoring to introduce it to the notice of the medical profession in general, we are not anxious to arrogate to ourselves the palm of originality—but are willing and proud to rank ourselves as subalterns in the task. To our friend Washington L. Atlee, M.D., of Lancaster, Pa., belongs the honor of having first collected and arranged whatever information we may, in the following pages, present, in an inaugural Thesis, laid before the Faculty of Jefferson Medical College, in 1828. Though we differ from him in some particulars, which at a future day we may notice, yet we embrace with pleasure this occasion for testifying our sincere respect for his sterling talents and laborious research.

Nosology is now so indispensably a part of the science of medicine, both from its convenience and utility, that we are somewhat bound, as true disciples of Hippocrates, to give our subject " a local habitation and a name " among the long list of disorders to which " flesh is heir." We would, therefore, designate it by the title of *Parotitis Mercurialis*—and define it as a specific, distinct, and peculiar inflammation, originating in and primarily affecting the parotid gland ; and which, if suffered to run an undisturbed course, speedily ends in gangrene, mortification, and death. The distinctive term *mercurialis*, as our knowledge of the disease progresses, may be considered objectionable ; but in the present situation, we are disposed to prefer it to any other we can at this time suggest.

Symptoms.—Our present limited acquaintance with this truly appalling and singular inflammation, and the paucity and unfrequency of cases, debar us from giving so full and distinct a detail of the attendant symptoms as we could desire. We will, therefore, confine ourselves to a sketch of the most prominent, and such as cannot be easily mistaken by an observant eye, especially when considered in connection with one another. From the few cases that have fallen under our own observation, or have been communicated to us by our friends, we have never known parotitis mercurialis to exist as a primary, independent disorder, or under any other circumstance than as a sequent of other diseases, particularly *febrile*, where *mercury* has been exhibited in the process of cure. When, therefore, in cases of febrile or other disorders, (where mercury has been administered,) arrived at that stage where the patient is just lingering between disease and convalescence, he complains suddenly of a sense of swelling beneath and in front of the ear, extremely tender upon the slightest pressure, either of the finger or of the pillow, rapidly increasing into a circumscribed tumor, which is hard, painfully lancinating, and spreading anteriorly, with pain on every motion of the jaw, we may, without hesitation, set it down as a case of genuine parotitis mercurialis. The enlargement of the parts is exceedingly rapid in its advancement, and speedily involves the surrounding structure in its disease. Extending, in a few hours, over the whole size of the head, affecting the palpetræ, the base and angle of the lower jaw, and the side of the neck ; it embraces, in its fearful progress, the connecting cellular tissues of the neighboring parts—the periosteum, the muscles, the parenchymatous substance of the gland itself, until the whole is one agglutinated mass of inflamed and diseased matter. The skin over the tumor is red, smooth, and glossy ; and, when felt by the hand, emits a heat which conveys the sensation of being pricked by needles, to the experimenter. The tension of the skin is very great, and the swelling resembles, in appearance and color, at least in some degree, an inflamed spleen, covered by a serous membrane. As the disease advances, the pain becomes excruciating, of a lancinating, burning character : the process of deglutition becomes difficult and painful : the voice is paraphoniac : the countenance is flushed and livid, and the sense of strangulation is oppressive. The tumescence having reached its acme, the pain most usually subsides, or is not complained of : the head is affected with a dull, heavy feeling : the tumor itself becomes livid : deafness of the ear of the affected side ; and finally, a low, muttering delirium, with other symptoms of an oppressed brain, and a sinking condition of the system, supervene. The tumor now becomes somewhat soft, and fluctuation is perceptible : a gangrenous suppuration ensues : the abscess bursts and discharges, generally in small quantities, a sero-purulent matter. Contrary to what might be expected, no mitigation of the symptoms appears : the central or glandular portion of the tumor still continues firm and hard : sloughing of the cellular tissue, resembling wet tow, takes place ; and the pulse, which, in the beginning, was hard, quick, and contracted, is now small, weak, and exceedingly rapid, beating as high as 150 or 160 in a minute. The disturbed condition of the cerebral system, instead of abating is increasing, and the patient sinks from exhaustion and debility ; or, in case of the abscess bursting inwardly, from strangulation. If undisturbed, the disease generally runs its course in four or five days.

Such are a few of the most prominent and characteristic features of this terrific malady, which a cursory and limited attention to the subject has enabled us to present.

We have never known it to occur during the continuance of an active ptyalism ; but only when the constitutional effects of mercury had, in a great measure, subsided, or entirely ceased. An active ptyalism is, however, not unfrequently known to appear, when the tumor is about subsiding, and becoming soft and less painful. Both parotids may be similarly affected at one and the same time ; but the commencement of disease in each is never simultaneous : several hours always intervene between the periods when inflammation is developed in the glands of the opposite sides.

Rationale Symptomatum.—If we examine attentively the symptoms which our partial observations have enabled us to enumerate, we shall find cerebral derangement one of the earliest and most lasting. This, (though probably owing, in some slight measure, to the peculiar state under which the system is laboring at the moment of attack, and during its continuance,) is no doubt chiefly caused by the direct effects of the accumulation of retarded blood, upon the substance of the brain and its meninges. The natural consequence of the rapid enlargement of the tumor is, to obstruct the free circulation of the blood in the cervical vessels, by its mechanical pressure ; but the supply through the carotid arteries is equally impeded with the exit of fluid through the jugular veins. Of course, we are obliged at once to seek further for the explanation of this symptom of engorgement ; and we find it readily by adverting to the fact, that while the removal of the surplus blood by the jugular veins is much obstructed, or almost cut off by the tumor, the brain is receiving a full supply through the vertebral arteries, whose long canal protects them from any injurious impression. The brain, therefore, is subjected to violent oppressions, by the superabundant and unnatural quantity of the nutrient fluid, and, as a reasonable inference, its functions become disordered, and its energy enervated. *Deafness*, such as is attendant upon this complaint, may be produced, either by the direct effects of pressure upon the Eustachian tube, or by the paralysis of the nervous system, originating in cerebral derangement. The mal-condition of the nervous system will also readily account for the *cessation of pain* on the arrival of the tumescence at its acme.—The explanation of the alteration of the voice; the sense of strangulation; the difficulty of deglutition, must all be sought for in the mechanical effects of pressure. But why does ptyalism so frequently occur towards the termination of parotitis mercurialis, especially when the disease is likely to assume a favorable issue? To answer this question correctly, we must refer to the state of the general system at the commencement of diseased action. We have distinctly stated in our exposition of symptoms, that parotitis mercurialis *never* originates during the progress of a ptyalism; and that a mercurialized condition of the body is absolutely and indispensably necessary for its existence. As far as the scope of our observation has extended, we know of no single case, unless as connected with, or consequent upon pyrexia. Now, from the well known and distinct effects of a febrile diathesis, and of a mercurialized state of the system, upon the exhalant orifices of the secretory vessels; and from the generally received Hunterian principle, that two diseased actions of a general character, cannot co-exist at one and the same time, in the same person, we can readily perceive why ptyalism is not a symptom of the inflammation in question. In this disease, pyrexia is always present, previous to its acme, either in a general or a local form. Mercury may be exerting its specific influence, in the latter case particularly, upon other glands, while the parotid itself shows not the slightest evidence of its action; but the moment the local phlogosis subsides, it then appears.

Diagnosis.—Fortunately for us, Parotitis Mercurialis can scarcely be confounded with any other affection of the same gland. Let this one rule be invariably borne in mind, and we can never be mistaken, that it *never* occurs as a primary disease, nor in any case can possibly exist where the system has not been under the influence of mercury in some form or other, for the cure of the previous malady. The suddenness of the attack, the extraordinary rapidity of its progress, the excessive degree of the inflammation, the acute lancinating pains by which it is attended, the general constitutional derangement, &c., all serve to point out its real and dangerous character, in contradistinction to cynanche parotidea; and the cold abscesses of the French, the critical abscesses of fevers; the only two diseases with which it can possibly be confounded, by the most Bœtian stupidity.

Prognosis.—The prognosis in this disease is most generally unfavorable. If 24 hours have elapsed from the period of attack, until the application of remedial agents, the condition of the patient is highly critical. Every moment of delay adds to the certainty of death. If suppuration ensues, or the collection of purulent matter cannot be induced to evacuate externally, the case is almost hopeless, and the physician need hardly resort to any other than euthanasial remedies, to soothe the sufferer's last hours of agony and distress. The occurrence of a ptyalism is always favorable. The ratio of deaths from this disease, to recoveries, is, as far as we can judge, as that of four to one.

Treatment.—In order more plainly to elucidate our therapeia, the medical treatment may be considered under three leading indications: 1st, of subduing the general pyrexial excitement when present; 2d, of procuring the speedy resolution of the tumor ; and 3d, of supporting the system during collapse.

Of the 1st, general pyrexial excitement is not always attendant upon parotitis mercurialis ; but sometimes it is present, and demands remedial attention. When this is the case, the usual antiphlogistic remedies must be resorted to at once. Venesection, prompt, and decisive, and carried to the extent of making a powerful impression on the system, and followed by active purgatives of a drastic nature, form the principal sanatory agents. If general nervous irritation become very violent, opiates, such as Pulv. Ipec. C., belladonna, hyoscyamus, acet. morph. &c. may be employed with some advantage. But it is to the 2d indication, that we are to turn all our attention and discrimination. We have already stated that the disease is peculiarly rapid in its progress ; and proportionate to the severity of the inflammation, is the speed with which it terminates in its highly morbid character. No time should be lost—for every hour adds to the certainty of its fatal issue. So short, indeed, is the period for the employment of therapeutic agents, and in which the disease may be considered as under the control of medicine, that the delay even of a few hours may render abortive our most potent drugs, and seal the doom of the wretched victim. When, therefore, we are called to a case of this kind, our first resort should be (after the administration of antiphlogistic means, if necessary) the application of blister, covering the whole of the inflamed surface. As the surface of the affected parts is generally extremely sensible, it would be advisable to premise its application by some stimulant article, to excite the parts, such as hartshorn, decoct. of canthar. in spts., tereb., aq. ammon., or even, in very desperate cases, nitric acid. It is only, however, in the first 36 or 48 hours, that epispastics can be of any real service. If they fail to have the proper effect on the first application, they should be frequently renewed, and assisted by the use of leeches. Should we fail in procuring the resolution of the tumor by this practice, and suppuration becomes unavoidable, or should we, unfortunately for the patient and ourselves, be called in just as this is commencing, we must endeavor, by every tangible means, to solicit it to the external surface, and prevent that most deplorable of all issues, the evacuation of the abscess internally. For this purpose, warm emollient poultices, renewed before they cease to return their warmth, should be constantly and immediately employed. The tumor in this situation is to be closely watched ; and should there be, or should there not be a pointing of the abscess, we ought to open it at once, with the caustic or the lancet, after the lapse of a few hours, preferring the *hazard* of death by debility and exhaustion, to the *certainty* of it by suffocation, should the abscess burst inwardly.

During the formation and continuance of this suppurative and gangrenous stage, it is, that our third indication must be imperatively and rigidly followed. To preserve the system from sinking beneath the exhaustion and collapse, we must support it by the employment of stimulants and tonics, both of a medicinal and dietetic character.

Throughout the whole course of this disorder, the bowels are in a constipated condition, and it is indispensably necessary to correct this. For effecting this object, we know of no better agent than the following :

—R. sulph. sublim. oz. ss. Pot. sup. tart. dr. vi. ij. ; one third of this to be given every hour, until purgation is attained. It should be employed every day.

Should the patient fortunately survive, the abscess, after sloughing, is to be treated as a common abscess of any other part.

Causes.—From an attentive perusal of what we have here laid down, and from our cases, it must be evident that there are in this disease two active and predisposing causes,—mercury, and fever, or some other previous general affection. It is not necessary for us to enter into any prolix discussion of the respective effects of each upon the system—they are well known and generally understood. Suffice it to say, that we have in them two powerful agents, both causing a morbid impressibility, though acting in opposite directions in its production. They cannot exist at the same time ; and whichever of the two prostrates the other, the debilitating and irritating consequences of the one will be heightened by the present or previous effects of the other. Yet, unless the relaxing and disgorging power (not the specific effect) of mercury prevail, we believe that the disease in question can never occur. To explain : " If mercury is exhibited in fever, so as to produce its *specific* constitutional effect, agreeably to the law of *unities* the fever must yield ; but if this point is not attained, it will, in some measure, still continue. In the first case, the vanquished fever will have added to the susceptibility of the frame ; and in the latter, the mercurialized state of the body will operate in the same manner." Thus it is, then, that these two antagonising powers, acting upon a syncratistical principle, lay the body open to the action of morbific agents from without. It is in this condition of the system, that the *exciting* or *proximate* cause, *cold*, acts with such terrible energy. In every case we have adduced, and every one we have seen, *cold*, either through an aqueous or aerial medium, had acted upon the part. We need enter into no labored effort to prove, that as cold is a powerful remedy in the removal of diseases, it must, of necessity, be equally efficient in producing them. One thing, in our mind at least, is certain, and that is, that local inflammations owe their origin to this agent, far more frequently than to any other. In relation to the subject before us, we are fully convinced, from our own limited experience, that *cold*, in one or other of its forms, acts as the proximate and exciting cause in the production of Parotitis Mercurialis.

In closing our remarks upon this interesting disorder, we will enter into the following recapitulation : 1st. That parotitis mercurialis never occurs as a primary, idiopathic disease ; but, perhaps, in every case after a fever : that a mercurialized condition of the system is essentially requisite for its existence ; and that cold is an indispensable agent in its production. 2d. That its progress is extremely rapid : its curable condition is very limited ; and that the prognosis is generally unfavorable. 3d. That the usual discutients are useless, and worse than useless, as they waste valuable time : that the only safe reliance is upon the course we have prescribed ; and that the tumor should always be opened in preference to running the hazard of internal rupture.

We cannot take leave of our subject without expressing an ardent solicitude, that so peculiar a disease may be more closely investigated by men of superior talents and longer experience.

Note.—The editor of the Western Journal, in which the foregoing paper was first published, appends to it the following note :—Cases of this kind, we think, are unfrequent : but we have met with one or two, somewhat analogous, under circumstances very similar. They occurred in old and debilitated habits, at the close of an attack of bilious fever, in which calomel had been administered, not very liberally, but to a greater extent than we would again be willing to give it under similar circumstances. Very slight salivation ensued, which was suddenly arrested, and the tumor quickly appeared, excessively painful, and very tedious, but at length terminating favorably, by healthy suppuration. Some unfavorable remarks were made, though we thought unjustly, as we considered the affection owing to some idiosyncrasy, which we could neither foresee nor control,—the calomel, probably, from some accidental circumstance, having affected the parenchyma of the gland, instead of its secreting vessels. We suspected, at the time, that the too early use of the quinine, by introducing a slight continued form of febrile irritation, with a red, dry tongue, had some influence in producing this result. The course pursued was, bitters, aloes and rhubarb, as a laxative, fomentations and poultices to the inflamed gland.

LEUCORRHŒA.

Leucorrhœa, with Affection of the Knee similating Rheumatism. By Mr. Smart, of Cranbourn.

Mrs. W. aged 32, a delicate person, a keeper's wife, always subject to irregularity of menstruation and confinement of bowels,—mother of three children, with the interval of six years between each birth,—about two months ago, in consequence of fatigue and damp, was seized with menorrhagia and leucorrhœa ; she kept about for a fortnight subsequently, and then was obliged, with an apparently inflammatory swelling of the right knee, to take to her bed, where she has been ever since.

She was attended at first by a gentleman who treated her complaint as acute rheumatism, without relief. Five weeks ago she became my patient, and I fell into the same error. The joint was considerably swollen ; very painful—constantly so, but more at night ; very tender ; *not* red. She said it was preceded by flying pains in various parts. She took colchicum, calomel with opium, steel, purgatives, but all without benefit. By this time I well began to doubt the correctness of my diagnosis, and my attention was directed to the situation and course of the pain she suffered in the whole extremity. A small blister was put on the inside of the knee, the surface dressed afterwards with morphine ; but this, with leeches, lotions, and fomentations, was without avail. Her bowels were kept regular under the use of castor oil. She latterly informed me of a copious fœtid discharge from the vagina, with great pain in the loins, which had existed a long time. I found the os uteri turgid and very tender. Then it struck me that the disease of the knee might be connected with this affection. Some femoral glands were enlarged and tender, and she pointed out the course of the pain from *Poupart's ligament*, *along the inside of the thigh, round the inner condyle of the femur* (where it was most acute) *to the front of the tibia, down to the foot.*

October 2d.—R. Argenti Nitratis ℈j. solve in Aquæ ℥vj. to be applied to the cervix uteri several times a day, by means of a piece of sponge attached to the end of a bougie.

5th.—Remarkable change for the better. The pain, with its depressing influence, she had borne so long, being *now entirely removed*, her spirits and strength are regaining their natural elasticity. She is able to bend the joint, which she had not done for the last five weeks ; she can change her posture in bed with facility ; the slightest motion before caused acute pain. The knee feels stiff ; less swollen ; less tender. The lotion gave no pain.

Pergat in usu lotionis.

12th.—Is down stairs ; sits up all day ; complaining of great weakness in the loins ; discharge "next to nothing ;" not fœtid ; the knee of its natural size, but she is unable to extend the leg ; the thigh still tender ; occasional darting pains down the leg to the foot ; appetite good ; bowels regular.

Pergat.

24th.—Gaining strength ; walks lamely.

Nov. 17th.—After straining herself in lifting, &c. discharge is apt to gush from her. Lumbar weakness nearly gone.

29th.—No more discharge ; has had daily a "sign" of the catamenia ; has left off using the lotion.

Dec. 26th.—Quite recovered ; has had a regular return of the catamenia. The limb sound.

Observations.—This is a case of irritable action of the lumbar nerves, occurring in a susceptible constitution, accompanied by profuse leucorrhœa and an inflammatory state of the neck of the womb, which in all probability re-acted on the original cause, exasperating it, prolonging it, and tending to propagate its morbid actions to parts remotely situated. The saphena nerve bordering on, if not actually in, an inflammatory condition, was the medium of this communication. In its course over the knee joint, being tied down by the tendinous fibres spread over the capsule, that restraint would prove an additional exciting cause of irritation to the neighboring structures.

Hence a disease of the knee-joint closely resembling inflammation, which, however, I would regard more in the light of neuralgic irritation, differing from inflammation, in resisting every method of treatment, but that which was adapted to remove disease from a distant part.

This case, too, bears testimony to the good effects of the nitrate of silver, as recommended by Mr. Jewell.—*Medical Gazette.*

For the Boston Med. and Surg. Journal.

TREATMENT DEMANDED BY MALIGNANT DISEASES.

The insusceptibility of the system, in malignant diseases, to the curative action of ordinary remedies, in their usual doses and frequency, is incredible to all who have not been familiar with such obstinate maladies. It is also equally inconceivable by the inexperienced, what enormous quantities of the most active articles of the materia medica may sometimes be taken in such cases, not only with impunity, but with the most palpable relief. Every physician knows, or it is his duty to know, that in spasmodic jaundice, some cases of colic, common cholera, and tetanus, opium sufficient to destroy life in a healthy man, or even in a moderate disease, is frequently taken with the most obvious benefit, and the manifest recovery of the patient. These are all spasmodic diseases.

What is there to prevent us from employing liberally, in fevers, the same remedy, upon the same principles, when they are attended with the same symptoms, that indicate the free employment of the article in spasmodic complaints? That there is nothing to forbid it, but that the practice is imperatively demanded, the whole history of *typhus syncopalis* or spotted fever, from its first breaking out at Medfield, to its treatment in the State of Ohio, three or four years since, most amply demonstrates. This disease gives the system such a shock, and so paralyzes the vital powers, during the forming, cold, or torpid stage, that there is either no subsequent period or stage of reaction,—or it is so feeble and irregular, that life cannot long be sustained without the most energetic, artificial excitement and support.

The case is exactly parallel in cholera. Dr. Barry and others have shown, that it is a febrile disease, in which the greatest danger exists, during the oppression or exhaustion of the vital powers, in the first stage. It is necessary to overcome the spasmodic and other exhausting symptoms immediately, to develope the existing powers of life, and to restore the waste of vitality, as soon as possible. For this purpose, *opium*, in large and repeated doses, is certainly the only remedy to be depended on, though it unquestionably demands the powerful aid of all proper adjuvants. External heat, rubefacients, epispastics, oil of turpentine or of capsicum, vapor of burning alcohol, &c. should be efficiently applied to the surface of the body and extremities. Internally, the opium is to be assisted with hot diluted alcohol, essential oils, capsicum, aromatics, and infusions of pungent, stimulating plants, all these carried to as great an extent, unless the urgent symptoms yield, as the stomach will bear. Foreign authors are but very poor guides, and we must resort to American writers if we wish to learn the full extent to which we may safely and surely carry our remedies, and particularly opium, in obstinate and sinking cases. It is nevertheless a strange fact, that our practitioners are generally much less familiar with our own writers, than with foreign authors. It would seem, that most of our physicians, who reside in parts of the country which have been exempt from typhus syncopalis and other malignant affections, have paid very little attention to the subject, and would be very indifferently prepared to meet such a formidable disease as epidemic cholera. If this is the fact, they ought immediately to look up everything that has a bearing upon analogous complaints, and no longer suffer themselves to rest satisfied with the imbecility of European practice. The false maxim, that "nothing is safe in disease, that might not be borne in health," though its fallacy is exemplified in every severe case of common cholera, colic, croup, spasmodic icterus, and tetanus, seems still to hang like the weight of a millstone about the necks of foreign physicians, in their treatment of the present epidemic. In violent cases, their usual practice can certainly have no appreciable effect. As well might Wellington, at the head of a sheriff's *posse commitatus*, or of a corps of cockneys armed with sword canes and pocket pistols, have contested with Bonaparte on the field of Waterloo. We have happily, within the reach of every practitioner, the most ample accounts of the kind of tactics, and the weapons, which American medical combatants have successfully employed, for more than a quarter of a century, in resolutely meeting and conquering a most deadly foe. CELSUS.

Communicated for the Boston Medical and Surgical Journal.

AMERICAN MEDICAL WRITERS.

In conversation with a very intelligent man of business of Rhode Island, a few years since, I was forcibly struck with one of his remarks concerning the degree and severity of several epidemics, that had at various times prevailed in his state. He observed, that if fevers had been as general, and attended with the same obstinacy and mortality, in Providence, as in many smaller towns and villages, it would have been considered that a pestilence was prevailing ; business must have ceased, and the capital, in a great degree, have been deserted. Upon a little reflection, I was convinced that his remark was literally correct, as respects the typhoid diseases of New England and the Middle States, the yellow fever excepted. The cholera infantum, and a few other diseases of children, which are generally agreed to be more unmanageable and fatal in cities, than in the country, I did not take into the account, in revolving in my mind an outline of the history of epidemics in this country, as far as they had come to my knowledge.

I recollected, that the malignant sore throat, of which Douglass has left us an account, that about a hundred years ago made such extensive havoc in many parts of New England, was comparatively mild and manageable in Boston. The fever mentioned by Dr. Warren in his Treatise on Mercury, which was supposed to have been contracted from the French fleet, during the revolutionary war, does not appear to have ever spread generally through the city, though it remained in Boston a long time. In the last war, pneumonia typhodes, while it was sweeping away the soldiers at Greenbush by scores, across the river in Albany was not much severer than an influenza. The same was the fact with New York, while the disease was raging among the troops on the neighboring islands. I believe it holds true, with respect to all the large cities, during the prevalence of that disease almost over the whole country, that severe cases of it were uncommon in the larger towns and cities. About the time of the death of Dr. Rush, typhoid diseases were somewhat prevalent in Philadelphia, but they were certainly less common than in the country, and in general not so severe. Sometimes, one or two low or filthy streets in a city may be sickly, as was the case some years since with the Banker street fever in New York, and the endemics at Fell's Point in Baltimore ; but a large share of the whole population has probably never been sick of a malignant disease, at one time, through any one large city, except during the prevalence of yellow fever. The spotted fever, or typhus syncopalis as it is now much more appropriately denominated, though it has occasionally appeared in some place or other, almost every year, in some one of the New England States, or in the State of New York, Ohio, or other parts of the country, for twenty-six years past, it is believed, has never raged violently or extensively in any village containing a *compact population* of more than two or three thousand ; and generally in these, as in Hartford in 1808 and 1809, it is confined to narrow limits. I have never known a malignant dysentery, or typhus, or pneumonia, or cynanche, generally diffused over a dense population of five thousand. I will not pretend to say, that during the present century, which on the whole, in comparison with the same number of years of the preceding, has been rather a sickly period, there has never been a solitary exception ; but I am persuaded that the remark of my friend, with respect to Providence and its vicinity, will hold good, as a general rule, in all the New England and Middle States.

Now the common inquiry will be made, *What then ?* What is your inference ? My first inference is, that as the typhoid diseases of cities have actually been milder, or the severe cases of them have been rarer, than in the country, so the practice has been milder, and less energetic means have been demanded, to produce an equally fortunate result, in a given number of cases. Foreign practice has consequently, with very inconsiderable variations, been applicable to most of the diseases of our cities. It has not, therefore, been necessary for city practitioners to pay much attention to the writings of our own countrymen, especially since there was inconvenience in it, as not many of them have been collected into Treatises, they being mostly scattered thinly through the periodicals of the last thirty years. As our large towns are the resort of men of talents, they give the tone to everything, and more particularly to literature and science. For these reasons, it has not, as yet, become fashionable to be familiar with American medical writers. Indeed, it has not been very necessary to consult them, except by those physicians who have had to treat diseases upon which they could find little or no light in foreign books.

There is hardly a symptom, perhaps not a single combination of symptoms, to be found in the malignant cholera, that our physicians, in some part or other of the country, have not been familiar with, and successfully met, during the epidemics of this century. Let their writings be collected and studied. Let our young practitioners be made acquainted with the diseases of our country, and not rely altogether upon foreign authors. The venerable Thacher has done much to diffuse a taste for consulting our own writers, and in his Medical Biography will be found a reference to most of their works. Dr. Calhoun, of Philadelphia, in his portion of the editions of Gregory's Practice, has made the same honorable mention of his countrymen. These writers will serve, in a good degree, as indexes to the various American authors that are worth consulting on the treatment of low, sinking, typhoid diseases. Now, if ever, while we are threatened with pestilential cholera, and the public mind is alive upon the subject, is the time to consult the works that have the greatest bearing upon analogous complaints, more especially since we find that the present epidemic has baffled the greatest foreign skill and science. CULLEN.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, APRIL 11, 1832.

SCARLET FEVER.

AT a period when the attention of our readers must have been so generally directed to this malady as at present, they will not fail to peruse with some interest an account of the plan of treatment pursued in Germany by M. Liebartz Stieglitz, of Hanover, the success of which has given it in that country very considerable reputation. There is indeed nothing very novel either in the theory or practice of Dr. S. In both he shows himself a faithful follower of Hippocrates ; and the simplicity of his therapea, his careful distinction of the successive stages of the disease, and his reliance on the vis medicatrix, while they distinguish him somewhat from the heroic practitioners of the day, unite to mark him a true disciple of the old school.

The commencing treatment, according to this author, should be an emetic substance in divided doses at intervals, so as to act, not violently, but for a long period. In administering this, it is necessary to watch its effect, lest, in place of vomiting, it cause diarrhœa, a consequence which cannot fail to be pernicious. When this result is threatened, it is better to employ ipecacuanha, with the addition of the tartr. antimon. than the latter article exclusively. One emetic administered in this manner will be found ordinarily sufficient. Some hours may now be allowed to elapse, during which the patient will recover from the exhaustion and likewise be benefited by the action on the skin which the vomiting will rarely fail to have produced. The next step will be to produce an action of the bowels. For this purpose the best article is the sulph. magnes. dissolved in a large quantity of water, and sweetened with oxymel. Three or four stools in the twenty-four hours are sufficient ; a few more will do no harm, but it should be seen that the medicine acts with gentleness and moderation. For infants, a milder cathartic may be substituted. The diet must be very light, consisting of succulent fruits and light vegetables, and for drinks, vinegar, the acid of raspberry or citric acid dissolved in water.

Patients support this regimen very well for two or three days, and the skilful practitioner will be satisfied to watch its effects ; not allowing himself to be surprised or embarrassed, though the disease lose nothing of its violence and the symptoms increase in severity ; because, strong in his individual experience and that of others, he knows that the best therapeutic method consists in moderating rather than interrupting the progress of the malady, and thus securing it a safe termination, unless circumstances imperiously demand more active treatment.

At the period now mentioned the disease may either preserve its sthenic character, or become adynamic. In the first case, if nothing disturbs the course of the symptoms, it will be sufficient to administer small doses of sal ammoniac, and to keep the bowels open by injections if needed. If the symptoms are aggravated, if the pulse become more rapid and the heat increase, if the patient give evidence of anxiety and have severe and repeated attacks of hallucination, this will be the moment to administer sulphuric acid as a beverage. This should however be at once suspended, if a tendency to critical evacuation be observed, such as bleeding at the nose. In this case, we must administer, morning and evening, a grain of mercurius dulcis, and place sinapisms on the lower limbs, without omitting the laxatives or the light diet.

The therapeutic system must however be wholly changed, when from the cerebral symptoms which present themselves, we have reason to fear the occurrence of asthenic inflammation. The approach of this formidable affection is announced by slight tinglings in the ears, occurring frequently but of short duration ; deep and prolonged slumber ; watching, with giddiness and periods of delirium, with headache in the intervals ; evident cerebral congestion ; diminished urinary secretion, partially replaced by sweats, and other well-known symptoms which mark the passage from sthenic disease to adynamia.

In this state of things evacuants must at once be discarded, and even leeches are dangerous. Beside a generally stimulant treatment, musk, infusion of snakeroot, with ether ; sinapisms, and especially the use of mercurials, both internally and in friction, are remedies of much efficacy. Mercury is the best remedy in asthenic inflammations, especially those of the brain and liver. It acts sometimes by purging, sometimes by salivation, and often produces beneficial effects without any obvious evacuation. Children are peculiarly likely to sustain and be benefited by the action of mercury, without diarrhœa and without salivation.

THE NEW ENGLAND FARMER.

The Effect of the past Winter on Fruit Trees.

We copy the following notes on the coldness of the past season from the New England Farmer, published in this city by Mr. Russell—a work we peruse every week with great interest and pleasure, and never without adding to our little store of useful knowledge. This paper has among its contributors the most enterprising, intelligent, and distinguished practical agriculturists and horticulturists in other parts of the country, as well as New England. If any of our readers are, like ourselves, curious of information on the subjects on which it treats, or, more fortunate, are practical farmers or gardeners, they cannot fail to derive satisfaction and profit from its rich and varied contents.

About three weeks ago, a communication appeared in the Farmer from the Hon. John Lowell of Roxbury, and another from Salem, in which the fact is stated that the fruit trees, within the observation of these gentlemen, have suffered very great, and perhaps permanent injury from the severity of the past winter. All the growth of the last season is killed, and there are reasons to apprehend that the trees themselves will not recover from the shock for several years. Mr. Lowell accounts for the fact in a very plain and philosophical manner. The heat of the summer was so great and continued so long that "the sap remained up and not inspissated, till the 30th of November. The severe, unusually premature severity of December, burst the vessels of the plants, filled as they were with a watery fluid." A similar cause has been assigned by other writers, so that although the trees may leaf out well the coming season, yet, the return vessels or veins being ruptured, the result in the autumn will be of the same nature as a general girdling. Since then, the same fact has been stated in communications, from Messrs. Edwards of Springfield, Me., Wheeler of Framingham, and other gentlemen residing in different parts of New England. Thus it appears that vegetable as well as animal life has encountered, at a serious loss, the unparalleled severity of the winter that has just terminated.

The following is the account referred to, which is contained in a communication from R. Green, Esq. of Mansfield.

Mr. Fessenden—The past winter has been long and cold. It commenced the last of November. December was colder, in the aggregate, than any previous one within the recollection of any man with whom I have conversed on the subject. From the first to the last of the month, excepting the 24th, there was a continued frost. On the 24th, the thermometer stood, at sunrise, at 25 degrees above zero, and at 12 o'clock a little thawing took place for two or three hours, and some rain fell in the meantime. According to my thermometrical register, there was, during this month, more severely cold weather, in the whole, than in any winter since 1823, before which, I kept no accurate account of heat or cold. January was a cold month. February was comparatively mild. March commenced cold, but soon moderated. During the winter, snows were frequent but small. From November 28th, 1831, to February the 28th, we had twenty-four snows, say from one inch to six inches in depth ; one in November, nine in December, six in January, and eight in February.

Whenever the mercury stands at or below zero, the weather may be considered severely cold.—The following table will show the very cold days during the past winter, and the coldest part of the day observed :—

1831, Dec.	8,	sunrise	2	*degrees below zero.*
	11,	"	2	
	13,	"	4¼	
	15,	10 P. M.	6	
	16,	5 A. M.	6½	
	18,	sunrise	0	
	22,	9 P. M.	5	
	23,	sunrise	2	
	31,	" say	10½	

1832, Jan.	2,	sunrise	2	*degrees below zero.*
	23,	"	0⅓	
	26,	10 P. M.	7	
	27,	sunrise	12½	
	28,	" say	10	
Feb.	6,	"	4½	
	11,	"	0	
	17,	" say	0	

It has been said, that the latent fruit of the peach cannot endure the cold so intense as to sink the mercury eight degrees below zero. Although my peach trees promised much last autumn, yet, as far as I have examined, the fruit is completely destroyed.

For several years past, the greatest degree of cold in this vicinity, was as follows :—

In 1828, 1 degree above zero. Peaches abundant and fine quality.
In 1829, 6½ deg. below zero. Peaches, none.
In 1830, 10 deg. below zero. Peaches, none.
In 1831, 6 deg. below zero. Peaches very few and poor quality.

A few days of warm weather in December or January, may cause the buds to make an effort to evolve ; in which case, a less degree of cold might destroy this delicate and delicious fruit. R. Green.

Mansfield, March 16, 1632.

Action of Ammonia on the Vaccine.—M. Nauche, of Paris, has given an account of some recent experiments of his, with regard to the power of ammonia over the vaccine virus. 1. Upon vaccinating with a lancet charged with the virus, but which had been exposed for some seconds to the vapor of ammonia, no development took place. 2. Inoculating one arm of the same patient with vaccine exposed to ammonia, and the other with pure vaccine, not only did no development take place in the first arm, but that in the second proved very imperfect. 3. After vaccinating a child as perfectly as might be, and in a few minutes afterwards making some slight punctures or incisions with lancets which had been exposed to the vapor of ammonia, the power of the vaccine was so far injured as to render the development very incomplete. These facts, M. Nauche thinks, taken in conjunction with the well-known effects of ammonia in various poisonous and contagious complaints, would warrant a fair trial for the volatile alkali in cholera, both as a preservative and a means of cure. Carbonate of ammonia, in sufficiently large doses, would probably be a valuable medicine in cholera.

FACTS RESPECTING CHOLERA.

From the last official report of this disease in London there had been in all 130 cases, and 81 deaths. These occurred in the space of about 20 days. So merciful has been the disease in that great metropolis, that some doubts were entertained whether it were really the same disease as that which has committed such ravages on the continent of Europe, and the excitement respecting it had greatly subsided. The degree of fatality, however, taken in connection with the symptoms, seem to mark its character most clearly, and its slow progress must be attributed to some circumstances not yet very clearly before the public.

Caution as to Diagnosis.—Prior to death, when it takes place during this stage, the disease sometimes assumes a form well calculated to deceive those not acquainted with its character. The pulse rises, the skin becomes warm and covered with perspiration, the patient expresses his relief, and, perhaps, his full anticipation of recovery ; in an hour or two, all is over.

Appearance of Tongue in Consecutive Fever.—The tongue throughout is most frequently moist, and sometimes coated. In general, however, as was observed by Mr. Glenton, it presents a red appearance, similar to what is seen in eruptive fevers. Sometimes the redness is confined to the tip and edges. This is the time at which, in my opinion, the lancet may be most advantageously used.

Blueness not a General Characteristic.—The blueness, so peculiar to this disease in other countries, has not been, by any means, a general characteristic in this. In not one instance in ten, has it assumed that form. The skin of the hands and face often become of a brownish hue.

Choleric Voice.—In the most deadly form of cholera there is a tone of voice, a wail, which once heard, can never be mistaken ; by him, upon whose ear it has fallen in the accents of anguish, it can never be forgotten. I have always found it the certain prognostic of death.

Lithotrity.—M. Lisfranc, the distinguished Surgeon of the French Hospital La Pitié, has been lately operated upon, by M. Civiale, for stone in the bladder. A complete cure is said to have been effected.

Whole number of deaths in Boston for the week ending April 6, 33. Males, 18—Females. 15.

Of infantile, 3—lung fever, 2—accidental, 1—consumption, 6—scarlet fever, 2—unknown, 3—paralysis, 2—debility, 1—croup, 1—typhous fever, 2—dropsy on the brain, 1—inflammation on the brain, 1– throat distemper, 1—old age, 1—quinsy, 1.

ADVERTISEMENTS.

THE CEREBRO-SPINAL AXIS OF MAN, with the origin and first divisions of its Nerves. From the French of M. MANEC, D M.P., Lecturer on Anatomy and Operative Surgery, &c. at Paris. Translated and revised by L. PANCOAST, M.D. Just received by CARTER & HENDEE. March 7.

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DYSPEPSIA.

Physiological and Pathological Observations on the Sympathetic Disorders and Consecutive Diseases of Dyspepsia. By WILLIAM JOHN THOMAS, M.R.C.S., of Liverpool.

THE innumerable and ever-varying symptoms attendant upon derangement of digestion, defy all attempts at systematic classification. Some excellent papers have been written upon the subject, and much information has been laid before the medical public; and yet we are compelled to confess that a considerable hiatus yet exists even in the historical delineations of the disease; many peculiarities remain unnoticed, and much further information has yet to be supplied before we can obtain a correct view of the nature of the disease in question.

After the excellent work of Dr. Johnson, which I consider the best extant, we may indeed be pardoned in supposing that little further might be required for the elucidation of the subject. That this gentleman has written well, is universally admitted by all competent judges; and the high satisfaction which I have derived from the perusal of his practical work demands a public recognition of its excellences, when treating upon a similar subject. My attention has been, for some years back, directed to the subject of derangement of digestion, in consequence of much painful experience of its distressing peculiarities. Having had the unenviable opportunity of scrutinizing the phenomena of indigestion in my own person, I endeavored to trace in my patients the progress of similar symptoms, and sympathies of an identical nature; in consequence of which investigation, I have deemed it expedient to throw out a few remarks upon the subject, trusting that they may be acceptable to your readers. It is not my intention to make many minute observations upon the most remarkable symptoms; for these being subjects of daily observation, may not demand so precise a consideration. The eructations of biliary matter, the formation of acid, and the distention of the stomach by containing gases, may, however, require a few observations.

The remarkable phenomena of the formation of acid in the stomach may be adverted to, in the first place. When a dyspeptic invalid has partaken of his ordinary food, the formation of acid commences; I have remarked, in several instances, that scarcely ten minutes have elapsed from the reception of the food before the acid is perceptible. Some physiologists have stated that the acid is the muriatic, and that it is secreted by the vasa vasorum of the stomach, and the arterial capillaries which these minute vessels supply ; but I am convinced that in many instances the nature of the acid is materially modified, and that occasionally, instead of an acid, an alkali is produced.

The great question which has hitherto eluded our inquiries is this—By what peculiar process is this acid produced ? Is it secreted, or can it be the produce of fermentation ? From a number of observations, and careful investigations of the subject, I have come to the conclusion that this acid is derivable from three distinct sources : first, I am convinced that a fermentation actually takes place in the *diseased* stomach ; secondly, I believe that the arterial ramifications occasionally secrete an acid fluid ; and, lastly, I apprehend that the production of either acid or alkali may be referred to a chemical decomposition of the ingesta : the primary elements of the food may combine together, and by their combinations form the new constituents of alkaline or acid principles. In the majority of dyspeptic cases, the appetite is good, a craving for food frequently takes place, and faintness will ensue if the demands of nature be not promptly complied with. The result of this morbid appetite is, that the patient partakes too freely of food, and, forgetting the diseased condition of the organ, he distends the stomach until the craving void in the epigastrium is filled up to satiety. The stomach thus becomes morbidly distended with solid ingestum, which immediately paralyses the motions of that viscus, and the phenomena of indigestion appear. The stomach being distended with flatus, the cardiac sphincters are violently burst open, and the eructations of the generated gases ensue. It would be a most desirable experiment if any of our minute chemical philosophers, who have so often illuminated the scientific world by their practical elucidations of complex chemical phenomena, would undertake to analyse these gases. The airs to be analysed might be conveniently received over mercury, and their primary elements and combinations accurately ascertained. A patient who has long labored under derangement of digestion could readily, at any time after a repast, furnish sufficient materials of an aëriform nature for the analysis of the scientific investigator. The physiologist might thus ascertain whether the gases produced bore any relative proportion to the primary elements of the food : he might compute the different proportions of the different gases produced by different species of food, and, by this proceeding, in some measure decide the important question whether these invisible agents are actually produced from the food, or secreted from the capillary apertures of the arterial exhalants. From the experiments on digestion instituted by Dr. Wilson Philip and others, we might conclude that the electricity of the brain or nervous fluid exercises a considerable influence over the functions of digestion : but experiments of this description, however laudable the motive for performing them may be, must necessarily be subject to many objections : first, we may consider that an accurate analogy can never be drawn from these experiments upon brutes, and applied to human beings, because we find that a great distinction exists between the two classes of beings. We all know that beasts and reptiles of the earth select food for themselves, which to them is perfectly salutary, but which to man would be pernicious, deleterious, and poisonous. Secondly, we cannot with propriety suppose that we are investigating the *natural* action of the stomach, when we first cut through important parts to arrive at vital organs, with which the stomach must of necessity sympathise, and which sympathy must originate a disordered process in equal ratio of activity to the sympathetic intensity. The learned and accomplished physiologists who make these experiments may, indeed, prevent vomiting by tying the œsophagus, but I do not perceive how such violent proceedings can possibly procure for us an opportunity of investigating the *natural* process of digestion. The distention of the stomach having proceeded to an extent which cannot be increased, the diaphragm and abdominal muscles contract ; the stomach becomes affected with spasm ; the pylorus is pushed inwards towards the duodenum, and its orifice is torn open ; the gaseous and fluid materials are thus protruded into the duodenum. When this bowel is preternaturally distended with air or increment, the ductus choledochus communis is, of necessity, acted upon by the physical agents, and, from the irritation produced by the distention, the gall-bladder becomes affected with spasm, and bile is thrown out profusely into the duodenum. A specific irritation having been already produced in this viscus, by the acrimonious chyme from the stomach, the pylorus is preternaturally affected, and no longer performs the office of a valve : the contents of the duodenum are therefore regurgitated into the stomach, and this unfortunate organ has now the advantage of the extraordinary stimulus of the bile, added to its own original acrimonious contents.

At this stage of the disorder, some remarkable phenomena generally arise. In the first place, a sympathetic pain is perceived in the occiput : this pain is described as that of a dull, obtuse, and vibratory sensation. In many cases, the affections of the head and stomach alternate in reciprocal participation of morbid action. I shall illustrate this position by a remarkable case. A gentleman complained of this dyspeptic cephalalgia ; it commonly occurred after dinner, when the biliary affections had previously prevailed ; a great degree of acidity was produced in the stomach after each repast, and he was accustomed to neutralise the acid with large doses of the bicarbonate of soda. Upon the neutralization of the acid, the gastric irritation subsided ; but the morbid action was transferred to the cerebellum, as the occipital sensations appeared to indicate. In this case the following experiment was instituted : The patient was instructed to neutralise the acid as usual with the bicarbonate, and, if the irritation of the brain succeeded, to plunge the head into a pailful of cold spring water. As usual after dinner, the acid was formed in the stomach, and when the eructations of concentrated acid, bile, and flatus, proclaimed the prevalence of gastric irritation, he swallowed several doses of the bicarbonate : in the space of five minutes, the disorder of the stomach subsided, and the headache ensued. After the latter symptom had continued for about half an hour, the patient plunged his head into cold water, and experienced an instantaneous relief from the headache. Whilst he was congratulating himself upon the efficacy of this new remedy, the stomach became affected a second time, and the contents vomited partook of the acerbity of " oil of vitriol : " the bicarbonate was again employed, and again the headache supervened. The cephalalgiac paroxysm became so intense, that the patient had a second time recourse to the cold bath, to alleviate or repel the pain, when precisely the same symptoms of gastric acidity reappeared, and the unhappy patient threw himself upon his couch in the anguish of unspeakable despair.

During these severe paroxysms of gastric irritability, a cloud of melancholy suspends its deep shadows over the agitated mind; a dejection of thought, with dark delineations of the prospects of futurity, takes place, and melancholy extends the black mantle of despair over the ideal felicities which had formerly flourished in the sunshine of mental serenity. The patient, under these impressions, invariably views his finances in the least advantageous light, and, although his coffers may be filled with gold, yet he will imagine himself upon the point of pecuniary insolvency. It will readily be admitted that these accumulated irritations in the stomach cannot long exist without the adjacent parts partaking of the disorder, and accordingly we find a tenderness upon pressing the epigastrium, extending over the hypochondriac regions. This pain upon pressure is not exactly indicative of inflammation; in many instances it appears the result of proximate irritation alone, for the pain subsides as the dyspeptic paroxysms disappear. This spontaneous subsidence of the fulness and tenderness of the epigastrium is, in my opinion, diagnostic of the earlier stages of dyspepsia: so long as the pain upon pressure exists merely in the form of paroxysm, we need not fear any actual disorganization of the coats of the stomach. I have remarked that, when the dyspeptic irritation attacks the bowels, which is frequently the case, the irritation in the stomach subsides; but if the purging be incautiously arrested, by the use of opiates, &c., the original affection of the gastric organ reappears. The same may be remarked of the strangury which occasionally appears as a dyspeptic symptom: it intermits with the stomachic irritation, and the immediate development of the one is the signal for the extinction of the other.

This fact peculiarly illustrates the axioms of physiology; for, whenever the heart, the liver, the brain, or the bowels, are sympathetically affected in this complaint, the disorder is confined to *one* viscus only; and we find that two distinct organs are never sympathetically affected at the same moment, unless the irritation has proceeded to an extraordinary degree of intensity; and whenever several viscera are symptomatically assailed by permanent irritation at the same time, we may rest assured that organic disease exists in the viscus primarily irritated, and also not unfrequently in the organs participating in a preternatural action, which has become permanently sympathetical.

That these irritations terminate ultimately by inflammation, is a maxim which daily experience compels us to admit; for, physiologically speaking, it is scarcely possible that the minute ramifications of nerves should be preternaturally excited for an indefinite time, without losing a portion of their peculiar powers or energies; and if they thus, by preternaturally excited action, lose a portion of their natural powers, the arterial ramifications, over whose specific action they continually preside, must necessarily be affected by the loss of nervous power. Thus, I apprehend, it will be generally admitted that the minute branches of nerves expanded over the serous tissues, and other delicate membranes, preside, in an especial manner, over the arterial and exhalant ramifications of those peculiar textures; and that the contractility and expansibility of the capillary organs are in equal ratio to the momentum of nervous impression. Let us then suppose, that, by preternatural excitement, the stimulating powers of these delicate nerves are at a discount: the necessary result will be, that the contractility of the arterial trains will become less intense; and the inferential corollary, that the balance between the exhalant and absorbent systems will be ultimately destroyed. When we consider that the electricity of the nerves is the principal cause of the diversity of the chemical phenomena of the secretions, we may expect that the materials exhaled from the arteries will be vitiated in their natural composition, and originate that permanent proximate reaction which ends only in the disorganization of the textures acted upon.

It is not my intention, in this rapid sketch of the consecutive symptoms of dyspeptic irritations and sympathies, to enter into the why and wherefore of the prerogative of nerves in the composition and decomposition of textures; but I would briefly remark, that, since all the materials of the body are deducible from the blood, the great modification of the constitutions of those textures compels us to admit that some formative agent must necessarily operate upon the unity of the primary materials; and we may infer that a galvanic modification of nervous power is sufficient to account for the phenomena of disorganization. I would not, however, be understood to maintain that this galvanic principle is the sole agent in the crystallization of the osseous, fibrous, or cartilaginous laminæ or fasciculi; but that I am firmly convinced that new complications of primary elements ensue at the extremity of the capillary exhalants, and these modifications of the secreted fluids, and the new arrangements of the primary elements, are caused, in a great degree, by the immediate operation of nervo-galvanic power upon the acuminated extremities of the exhalants. In this manner we may account for the ossification of the valves of the heart, which frequently occurs when the dyspeptic sympathies have for some time exercised themselves over that important organ. That spasms of the heart frequently arise from derangement of digestion, is a statement which will never be questioned by those who have had opportunities of remarking the progress of dyspeptic sympathies: the spasm invariably takes place towards evening, and the patient is frequently aroused out of his slumbers by an alarming apprehensibility of suffocation caused by the tumultuous action of the heart. A slow and obscure action of the exhalants is, however, a symptom of a more dangerous nature, and, by the derangement of the nervous power, these vessels secrete the bony spiculæ which cover the valves of the heart. I well remember a case wherein I severely wounded my fingers, by incautiously introducing them through the auriculo-ventricular opening during a post-mortem inspection; the valves being consolidated by bony laminæ and osseous projections, of a needle-like appearance. I may briefly advert to phthisis arising from the gastric irritation, as an example of the effect of this great morbid cause in originating consumption of a most fatal character. This disease may or may not be accompanied with expectoration, according to the intensity of the primary and consecutive irritation ; but, whether the discharge be profuse or otherwise, the disease is always attended with marasmus and hectic fever. In some stages of dyspeptic phthisis, I have remarked that the tongue is coated with a semi-pellucid pellicle, of a greyish substance, resembling coagulable lymph. The majority of cases of consumption of the lungs originating from dyspeptic irritation, terminate either by diarrhœa or typhoid fever.

It will be readily acknowledged, from the preceding observations, how exceedingly necessary it is to treat in a prompt and scientific manner the biliary disorders which originate these fatal maladies ; and this observation is the more necessary, since, although the primary irritation may be allayed by the use of medicine, yet, upon the slightest imprudence in diet, the disorder will be instantly aroused. The volumes that have been written upon diseases of the liver, the spleen, the kidneys, and circumjacent viscera, attest, in a peculiar degree, the necessity of attention to the action of that fountain of all nutrition, the stomach ; for we cannot expect the streams to be pure when the sources which supply them are contaminated.

I should exceed the bounds of a few observations were I to enumerate the multitude of symptoms, morbid sensations, and nervous shocks, that alarm the susceptible minds of dyspeptic invalids : sufficient has, however, been said to keep alive the attention of the medical world to one of the most powerful exciting causes of dormant constitutional affections, to the primary cause of the development of a number of local diseases, and to a subject whose peculiar interest consists in the incontrovertible fact, that, although many excellent observations have been recorded, and investigations instituted upon its specific peculiarities, much additional information has yet to be produced.—*Lon. Med. and Phys. Journal.*

EFFECTS OF SWALLOWING PINS.

Peter Kearns, a gardener, aged 56, of robust frame, was admitted into Sir P. Dun's hospital, under the care of Dr. Osborne, on the 16th of August. It was ascertained, from the testimony of his wife, that he had a singular predilection for keeping pins in his mouth, which he was in the habit of putting there almost every night on lying down to sleep. This circumstance was, however, not communicated until after they had appeared in an ulcer produced in his groin, and he persisted a long time in the belief that it was *impossible* he could have swallowed them.

On his admission he had pain in the right iliac region, increased by pressure or by straining at stool : there were fulness and tension of the part, together with swelling of the inguinal glands. It had lasted two months, having commenced from the cavity of the ilium, and gradually increased till within a few days, when the pain and tension forced him to seek the aid of a hospital. Repeated applications of leeches were used, with water dressings, and subsequently, poultices, and he got draughts of turpentine and castor oil, with hip-baths at nights.

23d.—The tumefaction and inflammation are increasing. The occurrence of flatulence moving in this direction causes a peculiar pain. Bowels confined during the last thirty hours. A dark spot has formed at the centre of the tumor, a wheyish-colored fluid oozes from around it, and there is a boggy feel, with crepitation, on pressing towards the centre, with induration at the circumference extending towards the pubis and a few inches down the thigh. He was delirious in the night, but there has been neither hiccup nor vomiting. Pulse 90; thready. A continuance of the poultices was directed, with a turpentine enema; and a table-spoonful of port-wine, in an effervescing draught, every hour.

24th.—The tumor has now been opened, and a large quantity of fœtid sanious pus has been discharged; had a motion this morning, which contained a small quantity of sanious pus; fermenting poultice to be applied; to continue the wine, and take a quinine pill four times in the day.

30th.—During the last four days there has been a copious discharge of fœtid yellowish pus, mixed with sanies, from the wound, and also some coagulated blood, but no repetition of purulent discharge by stool. In order to meet the tendency to sinking, which became very apparent, he got an increased allowance of wine, with porter; and, as his appetite was not much impaired, he was able to use meat diet. The sulphate of quinine was taken in doses of three grains, thrice in the day.

On the 4th of September, the inflammation having now subsided, and the ulcer having assumed a much healthier aspect, a large-sized pin, crooked to a right angle, and oxidized of a purplish black color, made its appearance at the bottom of the ulcer. A few days afterwards this was followed by another, and in some time by a third, previous to his departure from the hospital. After his return to the family with which he lived, the opening continued unclosed and without secretion for two or three months, during which time he acquired the name of the "*Pin-cushion*," from the exit of pins which take place at various intervals, most of them crooked, and all covered with a purplish black oxide above mentioned. On one occasion he was much alarmed by having "broken wind," as he expressed it, through the opening; but, with this exception, no remarkable occurrence took place after his dismissal from the hospital.

The passage of pins and needles from the intestines, through various and sometimes distant parts of the body, has often been observed. In the present instance, however, there were some peculiar circumstances worthy of notice. There can be but little doubt that the place where the pins were collected, was the cœcum, and the passage of purulent matter by stool, in connexion with the highly inflamed state of the parts about the cœcum, which at the same time began to secrete pus, denotes a communication taking place between the cavity of the intestine and the surrounding integuments. In connexion with this may be mentioned, that in a patient of Dr. Osborne's, who died of fever, there was found, in the vermicular appendix of the cœcum, a pin covered with large incrustations, which consequently must have remained there some considerable time, and yet did not appear to have excited any disturbance. The crooked figure of the pins in this case necessarily produced much of the pain and irritation, inasmuch as, whatever position they could be placed in while proceeding towards the exterior, they must have acted like barbed arrows. Once, however, an opening was effected by the passage of the first, the subsequent pins followed in the same track with the greatest facility, and in fact unperceived by the patient, who was as much surprised as his medical attendants could be, when, on taking off the dressings, the head or the point of a pin was described, peeping up among the granulations. With respect to the crepitus perceived in the surrounding integuments, the same is described in the majority of the very interesting cases of inflammation of the right iliac region, related by Mr. Ferral, in the Edinburgh Medical Journal, and is usually ascribed to the commencement of gangrene. In this instance, however, the air effused under the integuments was not to be ascribed to that cause, for the gangrene was principally superficial, and confined to one spot, while the crepitus was diffused through a considerable space, and in the body of the cellular tissue ; and again, long after the inflammation had been subdued, he passed air through the opening, as has been mentioned. In such cases as have been described by Mr. Ferral, it will be necessary to examine carefully as to the origin of the emphysema, and not hastily to ascribe it to gangrene. The adhesions of the cœcum with the cellular membrane outside the peritoneum are so intimate, and this portion of the intestine is so liable to ulceration, and consequently to perforation, that the passage of air from the latter into the former may very readily occur, and thus produce an appearance which, if mistaken for gangrene, will give rise to a very inappropriate course of treatment. It is evident that, in our case, the pins must have passed through the cœcum in the part now alluded to, and not through the peritoneum ; as, in the latter case, the symptoms of peritoneal inflammation would infallibly have been present.—*Medical Gazette.*

For the Boston Medical and Surgical Journal.

ON THE USE OF OPIUM.

Mr. Editor,—I am glad to see you calling the attention of your readers to the nature, use, and abuse of *opium*, since we shall unquestionably have occasion for its boldest employment, in case our country should be visited with epidemic cholera.

The largest dose of opium that I ever knew administered at once by a physician, was thirty grains. This was to a patient who had been subject to occasional paroxysms of *spasmodic icterus*, of the most painful kind. The dose soon relieved the paroxysms for which it was given, and was followed by no inconvenience. I do not, however, think such heavy practice justifiable. It would have been much safer to have given the opium in the quantity of four or five grains at once, if it had been necessary to repeat it every twenty or thirty minutes, for an hour or two. In the same disease, I once gave a female patient ten grains, within an hour and three quarters. Calling the next day, I found her comfortable, exercising herself by walking from one room to another.—A man called on me who, as he said, had just taken a half a wineglassful of laudanum, which he had mistaken for bitters. I gave it as my opinion, that if he continued to exercise, and did not suffer himself to fall asleep fora few hours, he would be in no danger; but as the safest measure, I advised, and rather insisted on giving him, an emetic. He, however, said he hated to miss his dinner, as it was about ready, and rather better than common; and besides, that it was indispensable for him to attend business in the afternoon. He consequently returned home, ate a hearty dinner of turkey, drank three or four glasses of Madeira, and then went to his customary employment, which was that of an auctioneer. No inconvenience followed.—A Professor stated to his class, that opium might be taken, with impunity, to an enormous extent, beginning moderately and increasing every hour till several grains were swallowed at a time, and then again diminishing it in the same ratio. Shortly after, three or four of his pupils, though attending the lectures and to their studies as usual, were under the operation of seventy or eighty grains a day. No disagreeable consequences followed the experiments of these young men, or inconvenience sufficient to interrupt them, or prevent them from attending to all their customary duties.—If the first dose is not large enough to extinguish life, and this is followed by another before the secondary or narcotic effects of opium begin to appear, it seems to be pretty evident that the use of this article may be carried to a very great extent, without any immediate danger. The greatest inconveniences, that I know of, are a troublesome itching of the nose, sometimes extending over the whole body, and torpor of the bladder, occasionally so great as to demand the catheter. There is, besides, frequently a considerable hoarseness. It has a peculiar effect upon the mucous membrane, lessening its secretions over all the surface where it is situated. I have never seen intoxication, or anything like it, either of body or mind, supervene, from taking this drug the most freely, when the precautions are rigidly observed of giving a new dose before the secondary effects of the former are manifested. Possibly I ought to except a few persons of an hysterical temperament, who sometimes act very strangely after taking a single grain. But some of these patients are exceptions to all rules, whether they take medicines or not. I believe that the opium sickness that is sometimes very troublesome, when the patient is in an erect position, rarely or never occurs when proper pains are taken to prevent the secondary effects, and the article is gradually and regularly abstracted.

I once knew a woman of upwards of eighty years of age, who was very active and industrious, and brought up a large family of children. She had been in the daily habit, for more than forty years, of taking a single dose of laudanum, to palliate an asthmatic cough. She had gradually increased the quantity of the dose, so that it at last amounted to a tablespoonful. She finally died of an acute *catarrhus senilis*. By palliating her cough with laudanum, she had enjoyed more comfortable health, and was more active, than most old people; and there was nothing peculiar in her last sickness, except a less susceptibility to the action of the usual remedies, than is common. Neither she, nor the other persons of my acquaintance who have daily used opium, were troubled with costiveness.

Perhaps the daily taking of opium is the most powerful *antaphrodisiac* known. Its habitual use for a time produces all but impotency. R.

THE TESTS OF MAGNESIA.

To the Editor of the Boston Medical and Surgical Journal.

Sir,—Upon looking over a February number of your Journal, I have been much surprised at some remarks therein contained, respecting Carbonate of Magnesia; and as their tendency is to render doubtful the value of the simplest test we have for judging of the purity of this article, I have been induced to send you the following brief remarks as a reply.

The writer has said, that heavy carbonate of magnesia is more missible in water than light carbonate, or even than carbonate of lime. To this I reply, that light carbonate may, by compression, be made heavy carbonate, and of course as missible in water, provided the heavy carbonate recommended, be unadulterated with carbonate of lime; and that no carbonate of magnesia is as missible in water as carbonate of lime.

Again—heavy carbonate of magnesia is said to be more pure than light, because the latter is combined with chlorides and sulphates of magnesia, lime and soda. We should be more inclined to suppose, that the *heavy* carbonate was thus contaminated; surely none of the salts enumerated, would conduce to its lightness!

The writer further remarks, that, "A few, and but a few generations back, carbonate of magnesia was many times its present price, so as to be worth adulterating with carbonate of lime"—the natural inference from which, is, that now the test by weight is unnecessary, the price of carbonate of magnesia being only 35 cents per lb., while carbonate of lime is worth 1 cent per lb., the difference is not sufficient to offer any inducement to adulterate.

In the latter part of the article alluded to, it is said, that in cases where sulphuric acid has been taken into the stomach, carbonate of magnesia is preferable, as a remedy, to carbonate of lime, for the reason that an insoluble crust is soon formed around the latter, preventing further action.—That magnesia is to be preferred to lime cannot but be admitted; but, that a crust should envelope a fluid mixture in the stomach, under any circumstances, more especially while in contact with an acid, for which it possesses a strong affinity, no one can believe; nor should I have alluded to this portion of the writer's remarks, were it not for the sentence preceding it.

The simplest tests of magnesia and its carbonate, are, lightness and tastelessness, and it is to be regretted that we have not as simple means of judging of the purity of many other medicinal articles; much more that any measures should be adopted, unnecessarily, not to say falsely, to render doubtful the few means which dealers in medicines now have, of estimating their purity. J. H. B.

April 10, 1832.

The foregoing communication from a practical chemist and apothecary, is in reply to an article on "The Varieties of Magnesia," which may be found on the 9th page of the present volume of this Journal. For ourselves, we have never found any preparation of magnesia but *Henry's*, which would leave no sediment, when mixed with water, and produce no wry faces when taken by children. Ed.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, APRIL 18, 1832.

SICKNESS AT NIAGARA.

Being firm believers in the doctrine of Sydenham, we cannot but have remarked the extraordinary constitution of the atmosphere, in most portions of the globe, for the last few years. Diseases, remarkable either for presenting new symptoms, or for an unusual degree of severity in those generally attending them, or for a measure or rapidity of fatality almost unprecedented, have visited the human family in almost every clime.

The king of all these is the cholera, about which the profession is already pretty well informed. The common cholera, too, has in England and other places assumed a degree of severity, which perplexes the wisest heads in distinguishing it from the Asiatic. The dengue is another of the new forms of disease which may be ranked among the productions of the last few years ; and still another is that which has prevailed in Paris, some account of which has been inserted in our pages. Among ourselves, the influenza of the past winter, though nothing novel in character, has prevailed to an extent seldom surpassed, and with a degree of malignity altogether unusual. The scarlatina, for the past year, has been far more fatal than in ordinary times, and most of the cases which have terminated favorably, have been attended with an excessive prostration ; many, with repeated and alarming syncope, and with a slow and often imperfect recovery. The common cholera of our summers has been frequent during the months of January, February, and March, and there are now, at a season when the disease has, in years past, been almost unknown, many cases within the borders of our own metropolis.

From the West, and the South, and the North, we have had accounts from time to time of mortal maladies, and we now learn from Upper Canada that a disease has prevailed there, exciting great alarm, causing many families to remove to Buffalo, taverners to close their houses, and other interruptions to the common routine of business. The symptoms or precise character of this disease we cannot exactly ascertain, as the only accounts of it before the public, are in the newspapers. A letter to one of these periodicals at New York, states that "the disease comes on with a cold chill, *invariably*, which continues in some patients an hour, in others several hours, and in some with great prostration of strength.

After this, a reaction takes place, with great heat of the body and strong determination of blood to the head ; intense headache ; in some cases slight vomiting of bilious matter, and in the generality of cases constipation. Delirium in many cases ensues ; others remain in a comatose state, and death terminates the sufferings in 48 hours. Some, however, linger seven or eight days—in some cases occasional spasms are met with, and in others are entirely absent."

There is certainly prevalent a state of the atmosphere that produces peculiar effects on the animal frame. Should the ensuing summer be as extraordinary as the past winter has been, these effects, we fear, will be too clearly developed.

SAVAGE MODE OF PRESERVING HEADS.

In the last number of the Journal of the Royal Institution, is an interesting account of the mode of preserving the human head which is practised by the natives of New Zealand. The attention of the individual who furnishes the account, George Bennet, Esq., was attracted by the appearance of a number of heads fixed in stakes, the faces of which had perfectly preserved their form, the cutis remaining perfect, and the hair strongly rooted. These he found to be mostly heads of chieftains slain in battle, which were preserved as honorable mementos of their valor. The process of preparing them is as follows. A hole being made in the bottom of the skull with a club, the brains are carefully drawn out and the interior washed. The head is then immersed in hot water, and the cuticle removed with great care, so that the hair which is loosened by this process may not be drawn out. A pit is then prepared so as to form a sort of oven, covered over except a central opening, over which the skull is placed. Water being poured into this pit, hot stones are rolled in at intervals, the steam from which arising passes freely into the skull. In the meantime, the septum marium and nostrils are plugged with bits of wood, and the latter stuffed with flax or pieces of soft wood, so as to give to the nose its natural shape ; and one person is employed in smoothing with his hand any inequalities which show themselves in the surface of the skin. When thoroughly steamed, the head is dried and then smeared over with oil ; although this last process is considered rather as contributing to beauty of appearance, than tending to its preservation. Heads prepared in this manner have been purchased and carried over to England, where they are esteemed a great curiosity.

TREATMENT OF ULCERS.

Dr. Bradford has a communication in the last London Medical Gazette, on the modes of treating ulcers. He thinks the methods hitherto adopted have been based on wrong views, and therefore proposes one on principles directly opposite. After enlarging considerably on these topics, we are favored with an exposé of the novel application, which is a succession of adhesive straps over the ulcer, so applied as to draw its edges towards each other, and over this a bandage from the foot upward! Truly, this is a novelty which will excite the deepest interest in every surgical practitioner.

QUARANTINE REGULATIONS—VACCINATION AMONG THE INDIANS.

It will be recollected that after the subject of the quarantine restrictions had been discussed by the Committee on Finance, in the House of Representatives in the Congress of the United States, it was, at the suggestion of that committee, referred to the Committee on Commerce. This committee, after diligent attention to the subject, and a correspondence with the civil authorities of the several sea ports on the coast, has reported a bill the more effectually to enforce such restrictions throughout the Union. The bill was passed through all its stages without opposition. The principal provisions are the following:

1. Every vessel arriving at any port in the United States shall be subject to the quarantine regulations of the port.
2. It shall be the duty of all officers of Revenue Cutters to assist in carrying into effect the quarantine regulations of the several ports, under the directions of the Secretary of the Treasury.
3. It is the duty of all licensed pilots to place in the hands of the commanders of all vessels they may board, copies of the quarantine regulations of the port, and of this act.
4. Any persons violating the provisions of this act, shall be liable to a fine not exceeding $1000—one half to the United States, the other half to the informer.

A bill has also passed Congress for extending the benefits of vaccination among the Indian tribes.

Mollescence of the Brain.—Much discussion has taken place respecting the nature and cause of softening of the brain. The earlier pathologists, when they met with this condition of the organ, did not attempt to account for it—and under the name of apoplexy were ranged the various alterations of the cerebral mass. Valsalva and Morgagni regarded mollescence of the brain as a kind of decomposition or putrefaction, the effect of which was suddenly fatal. When their scalpel detected this state of the organ, they looked upon it, not as the cause of the disease under which the patient had labored, but as the final termination of the malady. Bayle, Cayol, Recamier, and other modern pathologists, have drawn attention to the subject under consideration—carefully describing the appearances, and cautiously endeavoring to account for them. Recamier designates the morbific cause by the old name "ATAXIC FEVER"—and the effect he terms "foyer ataxique." Rostan is more cautious. He minutely details the symptoms and post-mortem appearances, styling the affection an "organic alteration," which, of course, prejudges nothing as to the nature or cause. Lallemand indeed is more bold. He ascribes the ramollissement at once to an inflammatory process—and in the majority of cases, there can be little doubt that this condition of the brain is the effect, the termination of encephalitis. On the other hand, when in and around the softened portion of brain, we can discover no sanguineous injection, no purulent infiltration, no morbid secretion whatever—nothing but a mere diminution of consistence in the nervous pulp—how can we call this inflammation ? Andral doubts the correctness of the exclusively inflammatory doctrine—and in a report from the Hôtel Dieu, published in a recent number of the Journal Complementaire, there are some cases related to show that Lallemand's hypothesis is not quite correct. Some of these we shall here notice.

Case 1. A female, aged 68 years, entered the Hôtel Dieu, on the 14th June, 1830, for a slight bronchial affection, for which she was treated in the usual manner, and soon recovered. On the 1st of July, this woman, while walking about the wards, suddenly fell down deprived of sense and motion. The pupils were contracted, the face pale, the respiration quick, the pulse hard and frequent. The case was pronounced, of course, to be apoplexy—and venesection, sinapisms, &c. were ordered. She lingered in a wretched state for 25 days, when mortification of the integuments of the back put an end to her existence.

On dissection, there was no turgescence of the vessels of the encephalic membranes. These membranes were rather pale than otherwise. The anterior portions of each hemisphere appeared natural ; but on approaching the middle lobes, they were found without consistence, and a certain portion reduced to a kind of bouillie, where all trace of cerebral texture was lost. There was no mark of inflammation, or even injection in any part of the brain.

Case 2. This occurred in the hospital for old women. A female, aged 78 years, of apparently good constitution, had been in the Salpètriêre since the 13th July, 1830. She was carried to the above institution on the 25th April, 1831. She had complained, for a fortnight, of her head in the right side, while there was numbness or sense of formication in the extremities of the opposite side. There was some impediment in her speech. She ate and slept well. The left arm gradually lost its motile power, and the lower extremity was benumbed. The other side possessed motility and sensibility.—There was little disturbance in the other functions. For a fortnight, or so, the paralysis gained ground, and then she remained hemiplegiac for a month or more. Pains then came on in the affected parts—agitation and delirium at night succeeded—the evacuations became involuntary—and death closed the scene.

On dissection, the meninges of the brain appeared gorged with fluid blood, which also flowed freely from the sinuses of the dura mater. There was nothing unusual in the external character of the cerebral mass ; but, on penetrating some way into the right hemisphere, a focus of mollescence (foyer d'un ramollissement) was discovered, six inches in length and two in breadth. There was no other organic alteration of any consequence in the brain.—*Medico-Chirurgical Review.*

Hereditary Syphilis.—Professor Haase has recorded some interesting cases in which syphilis appeared in very young infants, although their parents had been for many years perfectly free from any venereal affection, and to all appearance in perfect health. Many similar facts have been related by other writers. M. Haase infers that a syphilitic diathesis may be transmitted from parents to their offspring, in the same manner as the disposition to scrofula, &c., and that no *material* transmission is essentially necessary. M. H. is also of opinion that new-born children may inherit syphilis from the father, although the mother has never been infected.—*Bull. des Sc. Med.*

The Laws of Cholera are comprehended by Dr. Kennedy under the following designations.

"1st. *Climatic influence.* The contagion of cholera may spread in every climate, with its spreading powers but slightly, or not at all, impaired.

"2d. *Predisposition.* Persons in certain states of bodily health are peculiarly liable to be attacked.

"3d. *Latent infection.* The period of time during which the contagion lies dormant in the system rarely exceeds three days.

"4th. *Increase and decline.* When the cholera appears in a town, it extends rapidly, and, in general, runs through its course in the space of a few weeks.

"5th. *Contagion.* Cholera is contagious, and its contagion is of a highly diffusible nature."

Hufeland's Emetic for Infants.

R. Pulv. Ipecac. ℈j.
Oxym. Scillæ, ʒss.
Syrupi. Framb. ʒss.
Aquæ comm. ʒss. M.

A spoonful is to be given in coffee, at short intervals, until vomiting is induced, and it may be repeated if the action is to be kept up. For children more than a year old, a quarter of a grain of tartar emetic may be added to the above mixture, unless diarrhœa be present.—*Gazette des Hôpitaux.*

Delirium Tremens.—Of 43 patients laboring under this complaint, M. Pauli has lost but 1, and in 12 cases has been enabled to stifle it in its beginning. His grand remedy is fresh *ox gall*, in a dose of from 3 to 6 drachms (gros) in from 4 to 6 ounces of peppermint water, infusion of valerian or calamus aromaticus. Same time, the patient takes half a glass of brandy in the morning, and at night one or two grains of watery extract of opium.—*Rust's Magazine.*

Adhesive Plaster.—The following composition I have found to adhere to the skin with great tenacity, and without irritating it: it may also be melted by a very low degree of heat:—

R. Picis Nigræ, 2 oz.
Ceræ Flavæ, 1 oz.
Resinæ Flavæ, 2 oz.
Terebinthinæ, 1-2 oz. Ft. Emplast.

Electric Embryos.—For their important researches regarding *the formation of embryos by the action of electric currents,* Professor Delpech and

Dr. Coste have been recently presented with the large gold medal by the Societé des Sciences Physicales.—*Medical Gazette.*

Lateness of the Season.—The Gardiner (Me.) paper of the 10th inst. states that the ice in the Kennebec is 1½ foot thick. Last year the river opened on the 24th of March.

University Degrees.—At the Medical Commencement at the University of Pennsylvania on the 29th, the Degree of Doctor of Medicine was conferred on 133 young gentlemen.—45 were from Virginia, 35 from Pennsylvania, and the remainder from 12 other States.

Seventy-four young gentlemen received the degree of M.D. at the annual commencement of the Medical Department of Kentucky University, on the 20th ult.

At New York, on the 3d instant, the College of Physicians conferred twenty degrees of Doctor of Medicine.

New York Eye Infirmary.—Twelve hundred persons, it is said, were prescribed for at the New York Eye Infirmary in 1831, and 10,000 since its establishment in 1820. The collections in aid of this charity in one day were two hundred and fifty-five dollars.

The corner stone of a *Hospital for the Blind and Lame* was recently laid in Philadelphia.

Notice.—The communication we publish to-day on the subject of Opium, is from the pen of a long-distinguished medical practitioner, who assures us, to use his own words, that "all the facts mentioned have come under my immediate notice, or have been related to me by the actors in them, so that they are not rumors at second or third hand."

Whole number of deaths in Boston for the week ending April 13, 37. Males, 23—Females, 14. Stillborn, 2.

Of consumption, 2—lung fever, 4—liver complaint, 1—inflammation in the head, 1—scarlet fever, 8—old age, 5—brain fever, 3—measles, 2—convulsions, 1—unknown, 1—croup, 1—suicide, 1—teething, 1—infantile, 1—quinsy, 1—dropsy on the brain, 1.

ADVERTISEMENTS.

THE CEREBRO-SPINAL AXIS OF MAN, with the origin and first divisions of its Nerves. From the French of M. Manec, D.M.P., Lecturer on Anatomy and Operative Surgery, &c. at Paris. Translated and revised by L. Pancoast, M.D. Just received by CARTER & HENDEE. March 7.

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THE
BOSTON MEDICAL AND SURGICAL
JOURNAL.

VOL. VI.] WEDNESDAY, APRIL 25, 1832. [NO. 11.

UTERINE IRRITATION.

The Morbid Conditions of the General System and of Particular Organs which result from the Continuance of Uterine Irritation.

These of course vary very much both in kind and degree, but chiefly in degree, according to differences in particular constitutions, and according to susceptibility of individual organs.

The first complaint usually made by a female suffering from this irritation, is, of feeling *nervous*, probably with a disposition to be low-spirited; but if, in a well-marked case of the kind, you proceed to feel the pulse, and especially if it be your first visit, the chance is that you will perceive a distinct tremor of the hand, and a remarkable acceleration and sharpness of the pulse, evidently arising from mental agitation—a degree of mental agitation so great, in a naturally susceptible female, that if you attempt to soothe or encourage her, she will begin to sob, her lips quiver, and she bursts into a flood of tears. Even after she has sufficiently recovered her self-command, she experiences considerable difficulty in describing her feelings and sensations, and often appears to despair of satisfactorily communicating to you the nature of her ailment. She tells you, that, without any assignable cause, she gradually declined in health and spirits; that she has lost her wonted alacrity, has become indolent, and is easily fatigued by comparatively slight exertion; that she is readily flurried; that her heart often beats, flutters, or palpitates; that the impressions made upon her mind are altogether disproportionate to the causes producing them; that she is very prone to weep, and occasionally experiences sudden and transitory feelings of alarm and dread, especially during the night, without being able satisfactorily to account for them; in short, that both body and mind are in a morbidly sensitive condition, whilst general distress is strikingly depicted in her pale or dejected countenance. If you proceed in your inquiries to ascertain the state of the uterus, you are perhaps informed that she is regular; but if interrogated more narrowly, it will almost uniformly be found that she suffers pain, either before or during the flow, in the back or loins, and that in the intervals she is troubled with leucorrhœal discharge. To these inquiries she gives a reluctant reply; will often, perhaps from delicacy, conceal truth, or, if she acknowledge it, will probably add, "Oh, that is of no consequence; that is not my complaint; I have long been accustomed to that, and it does me no harm;" and then winds up the case with telling you that she has taken a load of tonic medicines without benefit. If you ask her whether such questions were ever put to her before, you are generally answered in the negative. Such a case as this, with slight modifications, is of common occurrence, yet it most frequently happens, that, with the general disorder, we have decided derangement of some internal organ or organs; and of these, the organs of digestion appear to be almost uniformly the first to participate; indeed the derangement of the digestive organs, to a greater or less extent, is so commonly associated with the general affection I have described, that one cannot but conclude that the general affection is most materially influenced, if not in part produced by it. It is sufficient, however, for our purpose to know that the exalted susceptibility of the general system and this deranged condition of the first passages, are very commonly co-existent, however they may stand in the relation of cause and effect.

The first appreciable disturbance of the stomach is most frequently a tendency to *flatulency*, which flatulency is productive of different effects in different individuals, although, in all, the stomach itself appears to be in a morbidly irritable condition, so as greatly to modify or aggravate the consequences that would otherwise arise from the presence of such flatulency. The patient experiences uneasiness at the scrobiculus cordis; she complains of a sense of load or distension after meals, or, if the stomach be uncharged with food, of prickings and anomalous pains in the organ, all of which symptoms are pretty uniformly relieved for a time by the expulsion of flatus from the stomach. In other cases, the irritation produced by the flatus about the cardiac orifice, excites a sympathetic affection in the throat, a sort of globus hystericus, which is variously described by patients, some calling it spasm, whilst others compare it to a mechanical obstruction, and indeed one lady somewhat fancifully compared it to a bullock in her throat. It is a sensation, however, which will often last, in a greater or less degree, for days, or even weeks, with little intermission.

At other times the patient suffers from repeated vomiting, or is perhaps seized suddenly, but only occasionally, with vomiting, preceded, accompanied, or followed by an irregularly inverted action, chiefly of the œsophagus, and attended with an ascent of flatus, so as, in some instances, to threaten suffocation.

Such are the ordinary affections of the stomach met with in the disorder to which I have alluded; affections, however, varying both in kind and degree in different individuals; affections, too, in which the whole alimentary canal appears more or less to participate, the patient being very commonly troubled with rumblings, distension and anomalous transitory twitchings in the bowels, symptoms undoubtedly depending upon the flatus and other contents irritating these already morbidly sensitive organs. In more rare cases there appears to be a sort of inverted action of a greater or less portion of the alimentary canal; an inverted action commencing in some part of the bowels; an inverted action accompanied by a rumbling noise in these organs; an inverted action extending to the stomach, passing up the œsophagus to the pharnyx, where it produces a most distressing sense of suffocation, and lastly communicating with and involving in one universal disturbance the brain and entire nervous system. This mysterious communication, so closely allied to the aura epileptica, is in all probability somewhat of the same nature, and may, perhaps, result from the same irritation in the alimentary canal being conveyed through the pneumo-gastric nerve to the brain; for when this takes place, the breathing is usually affected at the same time in a remarkable manner;—the whole assemblage of symptoms, the aberration of mind and bodily contortions constituting, when taken collectively, what in common language is understood by a hysteric paroxysm. There are, however, divers modifications met with—the patient being sometimes seized with violent and involuntary fits of laughter or crying during the paroxysm, at other times she will lie in a perfectly motionless and insensible state, but with a natural pulse, for hours together; or she shall suffer from a more or less perfect paroxysm without its being preceded by any globus whatever.

Hitherto, then, we have traced the effects of uterine irritation as they appear in the form of a general morbid sensibility and mobility of body and mind, with flatulency and irritability of the stomach and bowels; which symptoms alone, but in different degrees, may continue to harass such patients for months, or even years, without either a well-developed hysterical paroxysm, or any other inconvenience deserving particular notice. But it remains to be observed, that this exalted state of the nervous system is not, in a considerable proportion of cases, evinced solely by morbid susceptibility and excessive or irregular action, but, moreover, by *morbid sensation*, affecting different parts or organs of the body, and this too varying from the slightest uneasiness to the most exquisite torture.

Now, it is to these painful affections that I am anxious to direct your earnest and special attention; because, in the first place, it is to relieve these that you will most frequently be called upon to render your assistance, and because, in the next place, these painful affections are perpetually misunderstood and mistaken, to the serious detriment of the patient. I repeat, then, I am anxious, most anxious, to impress upon your minds the nature of these secondary painful affections, their most frequent seat, and the various sources of fallacy by which you may be betrayed into error.

Of these painful affections, the most serious, or at least the most prominent, and certainly by far the most interesting, are those which attack the abdominal viscera, as these are repeatedly mistaken for inflammation, and treated accordingly. I shall not stop to inquire why those viscera, supplied by the ganglionic system in general, or why the abdominal viscera in particular, should be more liable to suffer such painful affections than other parts of the body supplied by the ordinary nerves of sensation and voluntary motion; suffice it to say that such is the fact.

Of the painful affections of the abdominal viscera, the most frequent are,

1st. A pain seated under the left mamma, or under the margin of the ribs of the same side.

2d. A pain under the margin of the ribs of the right side.

3d. Pain in the course of the descending colon.

4th. Pain in the course of the ascending colon, especially towards the right hypochondrium.

5th. Pain affecting the abdomen generally.

6th. Pain in the region of the stomach.

And lastly, Pain in the region of the kidneys, sometimes extending down the course of the ureters to the bladder.

Such are the painful affections usually met with, attacking the abdominal viscera; affections, too, which, in point of frequency of occurrence, observe the order in which I have enumerated them. You will have noticed that I am reserved in referring these pains to any particular organ, contenting myself with the *fact* that the pain is felt in a particular *situation*. The truth is, considerable difficulty presents itself in ascertaining positively what particular organ is affected, as the natural functions of the part or organ do not, in such cases, appear to be necessarily disordered, or at least to such an extent as to indicate with certainty that it is the seat of the pain complained of by the patient; neither can we have the usual aid of *post-mortem* examinations, as few die of such complaints, whilst, if the patient be cut off by another disease, no organic lesion is discoverable to satisfy our inquiries. Occasionally, however, this question may be decided during life, as we shall see presently.

With respect to the *pain under the mamma, or under the margin of the ribs of the left side*, this is out of all proportion of most frequent occurrence, and will often last for weeks, or even months together, with but little intermission. This pain is very circumscribed; it is not necessarily or constantly increased by a deep inspiration or by external pressure, although this is occasionally observed; it is seldom attended with cough; it is not materially affected either by a charged or by an empty state of the stomach, but varies in its intensity, and now and then goes off altogether for a few minutes, hours, or even days, or the pain shall subside and be succeeded by a mere uneasiness or sense of fulness in the part. This pain, as I have said, is of extremely frequent occurrence, and is very often associated with palpitation of the heart, or, what is much more usual, with unnatural pulsation of the organ, if I may be allowed the expression; *i. e.* the patient is conscious of the heart's action, or she feels as if its impulse were communicated to a part so sensitive as to excite distinct sensation, which, you know, is not the case in a state of health. With respect to the precise source of the pain, I confess myself at a loss to speak with confidence or certainty, but am upon the whole inclined to assign it, when complained of under the left mamma, to the cardiac orifice of the stomach; or at least in one case in which it had prevailed for a considerable period, and in a very aggravated degree, I was led to this conclusion. The young woman, to whose case I allude, died suddenly in a fit, and I examined the colon, spleen, heart, and stomach, with the minutest attention, when the only indication of irritation I could detect was a ring of very delicate vessels, or rather a blush of redness, surrounding the cardiac orifice of the stomach, such as might be supposed to be the result of any continued irritation or spasmodic action. Whatever may be its precise seat, it is repeatedly, but erroneously, supposed to be purely of an inflammatory nature, and consequently is mistaken for and treated as pleuritis or splenitis.

The second painful affection to be noticed is that *seated close to the margin of the ribs on the right side.* This pain, although occasionally circumscribed almost to a point, usually extends from the scrobiculus cordis along the margin of the ribs, nearly to the loin of the side affected; it is neither considerably nor uniformly increased by a full inspiration, yet this is occasionally observed. External pressure, however, aggravates the pain, and sometimes in a very remarkable degree, whilst in some instances there is such tenderness, that the patient shrinks from the slightest touch. The pain now and then shoots through to the back or between the shoulder-blades, but very rarely to the top of the right shoulder. This pain will occasionally remain, with slight remissions, for weeks or even months; at other times, it subsides altogether, and is succeeded, like the pain under the left breast, by a sense of fulness or tension of the part. As to the actual seat of this pain, I again confess myself incompetent to decide. I have sometimes supposed it to be in the *colon*, as it may now and then be traced from the margin of the ribs into the right iliac region; in other instances I have supposed it to be seated in the *duodenum*, from its being occasionally attended with sickness, from its being aggravated during the operation of mercurial purgatives, and from its being in some rare cases attended with a remarkable sallowness or icteritious aspect of the countenance, and indeed with almost complete jaundice.

Here again, then, I must leave you in doubt, merely remarking, that it is not inflammatory, although repeatedly mistaken for hepatitis, and treated as such.

The next painful affection to be noticed is *that seated in the course of the descending colon.* This is not unfrequently associated with the pain under the left mamma, but is also observed to exist alone, extending from below the ribs to the *sigmoid flexure of the colon.* This, like the others described, is variable in its degree, and although more or less permanent, sometimes remits for hours, days, or even weeks together, and again returns. It is, however, more decidedly and obviously affected by flatulence, than the pains in the other situations mentioned; thereby more clearly pointing out the seat of the malady. The movement of the flatus is occasionally attended with a gurgling or rumbling noise, and a simultaneous aggravation of the local pain in the part. This is now and then mistaken for colitis, or for some organic lesion of the organ.

Fourthly, *Pain in the course of the ascending colon.* I have had occasion to observe, that the pain already described as situated behind the margin of the ribs on the right side, sometimes extends down the course of the colon as far as the iliac region; it not unfrequently happens, however, that the pain is felt exclusively in the situation of the ascending colon, and like that on the opposite side, varies in degree at different times, or for a period disappears altogether. This pain, too, after a time, is attended with considerable tenderness, so that the least pressure creates inconvenience.

Fifthly, *Pain affecting the abdomen generally.* This is by no means of rare occurrence, and in some instances so closely resembles general peritonitis, as to be mistaken for, and treated as that complaint. Indeed, I know of no disease more puzzling than this, and it was not, I confess, till I had witnessed several such cases, and attended minutely to the history and progress of the disorder, that I became convinced of its true nature. It may be called a general *neuralgia* of the abdomen. It is sometimes attended with a tympanitic, and at other times with a flaccid state of the bowels, the former being by far the most distressing. The pain is complained of over the whole of the belly, and the slightest touch, in many instances, cannot be borne, such is the extreme sensibility and tenderness of the parts.

If you watch the case attentively, you will, in general, soon detect some incongruity in the symptoms, to excite doubt and suspicion ; but yet, so close is the resemblance in some cases, as almost to set positive diagnosis at defiance. A case of this kind lately occurred to me, where I was in so much doubt, that, to err on the right side, I treated it as peritonitis, although the history of the patient, and the condition of the uterus, told against it : I soon became convinced that I had been wrong, as I shall presently explain to you. It may be observed, too, that this general pain of the belly, like peritonitis, frequently occasions but little distress, unless pressure be applied, and, like peritonitis also, it suffers an aggravation at intervals, an aggravation apparently in both cases depending upon the spasmodic action or griping in the bowels.

The *sixth painful affection* is that attacking the *stomach* in particular. This pain is for the most part strongly marked, and the more intense the disorder, the more positive is the evidence of its being really seated in the organ mentioned. Thus it will sometimes come on suddenly, occasioning the most excruciating agony ; the patient screams from the violence of her sufferings, her countenance is expressive of the greatest distress, and she leans forward or bends the body in order to diminish the pressure of the abdominal parietes ; or, she says that the pain is drawing her double. This, in some cases, will last with little mitigation for several minutes, or even hours, the patient the whole of the time making loud complaints, and declaring that she must die if not speedily relieved. This pain will probably remit, and be succeeded by another much less severe, though more permanent ; both the intense and more moderate pain being much increased by pressure made upon the epigastrium.

Lastly.—Such patients occasionally experience a sudden and severe attack of pain in the region of the kidneys, to which region it may be exclusively confined, till it disappear altogether, or it shall extend from thence down the course of the ureters to the bladder, or the bladder alone shall be affected with pain ; in either of the latter cases the patient generally experiences more or less dysuria.

Having pointed out the ordinary local affections arising from or connected with uterine irritation, I need only add, that you will often in the same individual meet with more than one of them existing at the same time ; or, what is more usual, you will have them alternating with each other ; whilst you will also observe the greatest variety in the relative severity of the general and local disorders mentioned ; the general derangement prevailing occasionally in a very high degree with but little local pain, and *vice versa.*

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, APRIL 25, 1832.

The preceding account of a very common and interesting affection, is from a Lecture on the subject of Uterine Irritation, by Dr. Addison, of Guy's Hospital, London. His excellent remarks on the mode of treating the disease we shall offer next week.

THE ABBE HAUY.

It is a remarkable fact in the history of the celebrated Haüy, that his study of mineralogy, to the successful pursuit of which he owes his reputation, was not commenced till the age of 40, at which time he was, and had been for fifteen years, a teacher of the Latin language at the College of Navarre, in Paris. An account of the accident which thus directed his studies into so different a channel, is thus given by his biographer Baron Cuvier.

The king's garden was in the neighborhood of his college. It was natural enough that he should frequently walk there. The numerous objects which met his view attracted his attention, extended his ideas, and exercised him still more in comparing and classifying. One day seeing the crowd of pupils entering the lecture room of M. Daubenton, he followed them, and was delighted to find mineralogy, even more than plants, suited to his natural turn for physical science.

But the pupils in the king's garden and M. Daubenton's auditors were content to leave botany and mineralogy just where they found them. Probably they understood both better than Haüy, because they had commenced the study earlier : but this long habit was precisely what had familiarised them with difficulties, which they came at length wholly to disregard. From learning these sciences later, M. Haüy was led to regard them differently. The breaks in the chain of analogies struck him the more forcibly, as in the plenitude of mental vigor he had thrown himself with his whole energy into a new pursuit. He had remarked the constancy in the forms of flowers, fruits, and all the parts of organised bodies, and could not conceive how minerals, so much more simple, and as it were more geometrical, should not be submitted to the same laws. How, said M. Haüy, does the same stone, the same salt, show itself in cubes, prisms, needles, without the slightest change in their composition, while the rose has always the same petals, the acorn the same curve, the cedar the same height and the same development.

It was while reflecting in this manner, that one day, in examining some minerals at the house of a friend, he by a fortunate accident let fall a fine group of calcareous spar crystallized in prisms. One of these prisms broke so as to exhibit on the broken surface faces not less smooth than those without, and which presented the appearance of a crystal wholly different in form from the prism. M. Haüy picked up this fragment; examined its faces, their inclinations, and their angles. To his great surprise, he finds them the same as in the spar with rhomboidal crystals, the Iceland spar.

A new world seemed to open before him. He returned to his cabinet, takes a spar crystallized in hexaedral pyramids, tries to break it, and again finds the rhomboidal crystal of the Iceland spar; the splinters which he lets fall are themselves little rhomboids: he breaks a third specimen, one of lenticular spar; a rhomboid is again found in the centre, and smaller rhomboids detach themselves from the mass.

"All is found!" he exclaims: the particles of calcareous spar have but a single form; it is by diversely combining, that they compose those crystals, whose various exterior deceives us. Proceeding from this idea he easily imagines that the laminæ of these particles being placed one above another, and gradually diminishing, must form new pyramids, new polyhedra, and envelope the first crystal as with another, so that the number and figure of the exterior faces might differ much from the primitive, according as the new laminæ had diminished on this or that side, and in this or that proportion.

If this was the true principle of crystallization, it could not fail to reign also in crystals of other substances; each ought to present uniform constituent particles, a nucleus true to itself, and accessory laminæ producing all the varieties. M. Haüy at once breaks in pieces his whole collection; his own crystals, and those obtained from his friends, all come under the hammer. He finds everywhere a structure founded on the same laws. In granite the form is a tetraedron; in fluor spar, an octaedron; in pyrites, a cube; in the heavy spar and in gypsum, it is a right prism, with four faces, but with a base having different angles. The crystals always break into laminæ, parallel to the faces of the nucleus. The exterior faces can always be understood as resulting from decreasing laminæ, the decrement being more or less rapid, and taking place sometimes by the angles, sometimes by the edges. The new faces are only little steps, or little series of points, produced by the retreat of these laminæ, and appearing planes to the eyes, on account of their tenuity. No crystal which he examines offers an exception to the law. He exclaims a second time, and with more assurance, "All is found!"

But to make assurance doubly sure, a third condition must be established. The nucleus, and the constituent particle, having each a definite form, strictly determinable in its angles, and in the relation of its lines, each law of decrement ought to produce determinable secondary faces, and even the nucleus and particles once given, it ought to be easy to calculate, a priori, the angles and the lines of all the secondary faces, which the decrements could produce. In a word, it was requisite here, as in astronomy, in order that the theory should be established, that it should explain precisely the known facts, and should with equal precision foresee those which were not so.

M. Haüy felt this ; but for fifteen years that he had passed the best part of his day in teaching Latin, he had almost forgotten the little geometry which had been taught him at college. He quietly went to work to regain it. He who had so quickly learned botany to please his friend, could find little difficulty in acquiring sufficient geometry to complete his discovery, and after a very few trials he found himself fully rewarded. The hexaedral prism which he had broken by mistake, gave him, by an ingenious observation, and simple calculations, a very near value of the angles of the molecule of spar ; other calculations gave him those of the faces, which are added by each decrement, and by applying the instrument to the crystals, he finds the angles precisely of the measure which the calculation gave. The secondary faces of the other crystals were as easily deduced from their primitive faces ; he even found that for the most part, in order to produce secondary faces, it is sufficient to allow for decrements in very simple proportions, such as are in general the numerical relations established by nature. It was then, that for the third time, and at length without hesitation, he exclaimed, " I have found all ! " and at last gained courage to mention his discoveries to his master Daubenton, whose courses till then he had followed in silence.

Enormous Dilatation of the Biliary Ducts.—M. Berard has met with a case in which the biliary ducts were enlarged from twelve to fifteen times their natural size in the parenchyma of the liver. The patient had neither icterus nor obliteration of the ductus choledochus, but the biliary ducts contained many calculi.—*Rev. Méd.*

Cæsarean Operation successfully performed. (*Archives Générales de Médecine.*) An extract is given in this Journal from a late thesis of a Parisian graduate, M. Jolly, giving an account of the remarkable success which his father, a surgeon at Chateau-Thierry, has experienced in performing the Cæsarean operation. He has operated six times, five of his patients being country women, and the sixth an inhabitant of the town. In all, the labor had lasted at least forty-eight hours before the operation was performed, and the waters had been discharged. In one patient only of the six no fatiguing attempts had been made by midwives or accoucheurs to finish the labor. He always made the incision on the linea alba, between the navel and pubes, and divided the uterus in the same direction, taking care to restore it first to the perpendicular position, if it was inclined. There was never any material hemorrhage ; no patient, indeed, lost more than two ounces of blood. In dressing the wound he always had recourse to the gastroraphy, which, instead of producing the ill consequences usually ascribed to it, appeared to him always to contribute greatly to the cicatrization of the wound. In two of the six cases no untoward symptom whatever followed the operation, and the cure was perfected before a month expired; in two others a smart degree of inflammation of the abdomen supervened, but was successfully combated by venesection, baths, and fomentations; and the remaining two died evidently of metroperitonitis, one on the fourth day, the other at a later period, when there appeared every chance of her recovering under the antiphlogistic treatment. Of the six infants, four were born alive and survived, but two were dead after the operation was concluded, although they were thought to have been alive before it was performed. In no instance did hernia ensue; but there was always some prominence of the abdomen at the cicatrix, which had diminished from six inches in length to three only.—This is the most favorable statement which has ever appeared on the subject of the Cæsarean operation.—*Edinburgh Med. and Surg. Journal.*

Monthly Notice of New Publications.

A Practical Compendium of Midwifery, &c. By the late ROBERT GOOCH, M. D. Prepared for publication by GEORGE SKINNER, Member of the Royal College of Surgeons, London. Philadelphia, E. L. Carey and A. Hart, Chesnut St. 1832. 8vo. pp. 319.

DR. GOOCH is well known to the public as having enjoyed for many years a very extensive midwifery practice in London, and gained considerable reputation as a teacher in this branch of medicine. The present work is principally a practical compend, without much of novelty to recommend it, but containing a sufficiently full account of the principles of the science, with plain and judicious rules of practice which are calculated to render it a useful work. The faults which it exhibits, indeed, are chargeable on the Editor rather than the Author. They belong to it in common with a class of publications, which are new to the public, within a few years, and the peculiar character of which does not seem to have yet attracted the attention which it merits. The class we allude to is that of works, compiled from the Lectures delivered in the Medical Schools in London, taken down in short hand by students, and published in the very words used by the lecturers themselves. In this way two or three periodicals have been furnished with a large and perhaps the most popular portion of their contents, and some few separate works have been got up, of which the present is no unfavorable specimen. In some minds a scruple might arise as to the fairness of thus appropriating to a personal speculation the fruits of others' labor. The legality of this proceeding has, however, been successfully maintained, and, if we may judge from the occasional observations touching this matter, which we see scattered through the foreign journals, the lecturers themselves have found it best to make a merit of necessity, and when consulted on the subject have given a free consent to this use being made of their oral addresses. What good effects may have resulted from this in disseminating medical knowledge, we cannot say ; but it appears to us, that the system is not calculated to raise very high the reputation of the individuals whose words are thus quoted, or to elevate the standard of medical literature. Indeed we do not believe that so much vulgar, not to say licentious language, so much stale wit and coarse allusion, or so much wild, loose and rambling speculation under the pretence of Science, could be collected from all the medical publications for fifty years previous to the last ten, as has made its appearance during that time in the form of reported lectures. In saying this, we impute but a very limited share of the blame to the lecturers themselves. In a crowded city, like London, where such a multitude of competitors are engaged in this employment, it is not to be wondered at if men, even of high standing in the profession, should find themselves obliged to resort to popular arts to gain popular applause ; that they should, even at some hazard of their personal dignity, entertain their classes with humorous incidents drawn from the details of private practice ; with scandalous anecdotes of female frailty, obtained in the confidence of domestic intercourse ; with detailed descriptions of matters not very delicate in themselves, and not absolutely indispensable in the way of useful information ; that they should, in fact, sometimes cater for a depraved appetite, or minister to idle and gaping curiosity. In all this the apology of the bad taste of the lecturer may be found in that of his audience ; and much that might otherwise be condemned, finds a ready excuse when viewed as making part of the confidential intercourse between a teacher and his private pupils. But the matter assumes a very different aspect, when expressions of this sort are dragged into that publicity which is given to a weekly journal, or come to make part of a systematic treatise. In the former case, their circulation is by no means limited to professional readers, merely : they appear among the novelties of the day in libraries and reading rooms ; they are thrown in among the families of medical men, and from the popular form in which these publications appear, are taken up and read by every idle passenger. Now we are not disposed to estimate extravagantly the mischief which books containing loose expressions can do to the cursory reader, when so many more powerful means exist of vitiating the taste and corrupting the morals of the community ; but we feel safe in saying that such expressions are not calculated to instruct or to edify. As respects systematic works compiled in this manner, their influence on general readers is much more limited, since the greater part of these are deterred by their technical character from encountering their contents. We cannot but feel, however, that they are not creditable to the science and taste of their reputed authors, and do less than justice to the character of the profession. It is preposterous to answer to this charge, that the nature of medical subjects requires the use of terms not strictly in accordance with scrupulous delicacy. The apology is at best but a partial one ; for the expressions to which we allude are those introduced wantonly and without being at all necessary to the elucidation of the subjects. But the fact is that there exist standard works in each and every department of medical science, in which the subjects are fully treated without the occurrence of a single expression which can gratify an idle fancy. It is not then essential to the character of medical works to be indelicate or coarse ; nor is this circumstance a recommendation to the reading public. Many of the older medical works have on this very account been consigned to oblivion ; and a similar fate as surely awaits those publications of the day which, however meritorious, contain expressions offensive to delicacy and good taste.

In applying these remarks to the work before us, we deem it just to qualify a censure which we have aimed principally at certain reports of lectures contained in a popular periodical. In this we rather object to a certain flippancy of manner, suited only to the character of a popular lecturer, than to any reprehensible passages, though such perhaps might be found. We cannot doubt that had Dr. Gooch prepared the work for publication, it would have appeared in every respect worthy of his fame. Whatever was prepared by him for the press, and appeared under his sanction, is rather remarkable for purity of thought and elegance of expression. Under similar care and revision, the present work would undoubtedly have received some improvements, and been still more worthy of a conspicuous place in the library of the student. As it is, it is by no means destitute of such merit. On the contrary, the practitioner of midwifery will find in it much to aid him in his laborious and anxious duties. The modes unfolded by Dr. Gooch, of treating the diseases of females and of infants, as well as his management of the latter in their earlier weeks, and the former during utero-gestation and labor, will be found judicious and satisfactory ; and, if the work before us is somewhat deficient in dignity and elegance, it is certainly ample in illustration and copious in details that may not be unacceptable to most, or without practical benefit to the younger members of the Profession.

Dictionnaire Universelle de Matière Médicale et de Thérapeutique Générale. Par Merat et De Lens. Paris. 1830.

We have seen with much pleasure among the new productions of French medical literature, the three first volumes of a dictionary of the Materia Medica, to be completed in six of about 700 or 800 pages. Its professed object is to furnish an account of all the medical substances, medicinally employed, in every part of the world, so far as they have become known to the science ; of their natural history, mechanical and chemical characters ; of their effects and uses. The plan also includes an account of medicinal agents, not usually treated of in similar works, such as air, caloric, electricity ; of the mineral waters diffused over the globe ; of the various articles of diet, and of poisons. Of the extent of the work, and the nature of the plan, some idea may be formed from the following list of the articles, which we take from the Preface.

Articles on Materia Medica, Therapeutics, and Toxicology,	6,000
Food and drink,	2,500
Mineral waters,	2,000
General articles, classes of medicines, natural families, physical agents, &c.,	15,000
Synonims, chemical, officinal, vulgar,	6,000
" in foreign languages,	7,000

As a specimen of the manner in which the work is got up, we subjoin an extract on the use of belladonna as a preservative from scarlet fever.

Many German physicians since Hufeland assure us that by submitting to the influence of the extract of belladonna, persons who have been exposed to the contagion of scarlatina, they will be secured from contracting it. In 1820, a very violent epidemic scarlatina having shown itself at Guterslob, no child was attacked with it who had previously taken the extract. (Rev. Med. x. 213.) It was given for the space of eight days. Hufeland has collected thirteen reports of divers German physicians, which have confirmed his opinion of the efficacy of this article. The professor thinks that its effect depends on diminished nervous susceptibility, without which there can be no contagion. (Jour. de Santé, Mar. 1826.) M. Martini also believes in this preservative power. (Rev. Med. II, 371). M. Ibrélisle, physician at Metz, has seen twelve children preserved by this means from scarlatina, which attacked two hundred in the midst of whom they lived. (Bull. de la Soc. d'Em. 1823, Avril.) Dr. Nelson has given this plant to 247 persons, of whom 13 only contracted the disease. He prescribed 2 grains dissolved in 2 ounces of water, and 2 drachms of alcohol, of which he administered 15 to 20 drops daily. We observe that the use of this medicine is free from danger, and that there is no inconvenience in putting it in practice. It would appear from the researches of Dr. Wagner, on the comparative mortality of epidemics in which this remedy is, and is not employed, that in the former one patient dies out of sixteen, in the latter one out of three. Whole villages have preserved themselves in Germany, by taking belladonna when the disease has been epidemic in the immediate neighborhood. All the documents on the efficacy of belladonna as a preventive of scarlatina, have been collected by Hufeland, and published in a separate work. On the other hand a few physicians, whose proofs are not very conclusive, such as Schwurtz, &c. deny the preservative influence of belladonna against this disease.

We intend, from time to time, as occasion offers, to present to our readers other extracts from this interesting work.

A Catechism of Facts, or Plain and Simple Rules respecting the Nature, Treatment, and Prevention of Cholera. By A. B. GRANVILLE, M.D., F.R.S., F.L.S., F.A.S., F.G.S., M.R.I., &c. &c. Philadelphia, 1832.

How strangely, of late years, is the term *Catechism* perverted. In our youth it was associated with the best and most holy instructions of the Sabbath, and the very sight of the word brought to mind the sacred duties it was wont to teach. But the charm is now broken. It is appended to works the most trivial and common-place, on subjects of almost every description: catechisms we now have of chemistry, philosophy, mineralogy, &c., most of which, if not all, are calculated to convey a very superficial knowledge of the sciences of which they treat—a degree of knowledge which is not only almost entirely destitute of advantage, but actually injurious or dangerous. There are subjects that may be well taught in such popular forms; but there are others, with respect to which the maxim *drink deep, &c.*, cannot be too strongly enforced. Of all the modern "Catechisms" that have come under our observation, the most absurd and preposterous is the Catechism of Health—a book that contains many directions that are exceedingly ill judged, and others too simple to require being thus brought before the mind. All men but idiots know that night is the best time for sleep, and need no book to inform them that too much eating overloads the stomach.

In ranking this work as the most absurd, we should except that, the title of which is given above—*A Catechism of Cholera.* The work in itself is a mere compilation of the most unimportant facts, chiefly designed to vent the author's apparent spleen against certain magistrates in London, and still more expressly to puff a nostrum of his own composition.

This work appears to us to be an ingenious expedient on the part of the author, to take advantage of any popular alarm in England about the cholera, to fill his own pockets, and, perhaps, those also of his friend and apothecary. The "alkaline drops" are recommended as the first thing to be taken by every individual attacked by the disease, before medical aid arrives. In addition to this, it is recommended as the best *preventive.* Thus has the author taken up the whole ground, and brought into notice an article which he would have every person purchase, whether sick or well, the moment the approach of cholera begins to raise the inquiry—what shall I do to escape it? or, what shall I take if it attacks me?

The book is a very small one, only about 100 18mo. pages, calculated for general circulation among all classes of people. The following extracts will show in what light the nostrum in question is held up by Dr. G.

"The great point in choosing from among the alkaline medicines which we mean to use, is to select one which shall be easily taken, which may be taken in a small compass, which shall be rapid in its effect of destroying the morbid agent in the stomach, and which shall impart tone to that organ, and energy to the circulation—neither magnesia nor bismuth possess all these requisites, though excellent in themselves. Hartshorn or sal volatile, or carbonate of ammonia, is preferable, but not, I think, sufficiently energetic, and permanent in the effect. These considerations have led me to think that the "alkaline drops," which I mentioned in speaking of the treatment of cholera in another part of this work, would answer all the purposes above stated, and I was induced to think so by the extensive experience I have had respecting their use in cases of common indigestion and acidity of the stomach. Accordingly I lost no time in recommending all those, among my acquaintances, who have asked me for instruction how to act in case the cholera should appear in England, (and what person has not put the same question to his medical attendant by this time ?) to take, as a preservative from one of the most prolific causes of cholera, acidity, and want of tone of the stomach, ten of the "stimulating alkaline drops" every night at bed-time, in a large wine-glassful of hot or cold water, and I have myself adopted the same plan. It is remarkable that several of these acquaintances who had before been habitually subject to indigestion and bile, and languid circulation, have, in the course of a few days of taking the preservative drops, been materially relieved from the unpleasant symptoms which before afflicted them. If, on going to bed, I find that the dinner is not undergoing an easy digestion in the stomach, and I experience any uneasiness, or feel the slightest acidity, I increase the number of drops from ten to fifteen."

In order to get other competitors out of the way, the author begins by saying :—

"I premise my suggestion by stating that I place not the slightest faith in your Cajeput oil, camphor, oil of peppermint, or cinnamon—your pure stimulants, and all the cholera drugs which the late Board of Health have suddenly raised into notoriety by their recommendation, and through notoriety into a high price, which has proved the means of making the fortunes of some score of druggists. That which I recommend is simple, cheap, and I trust will be found intelligible as well as easy of execution."

Thus much we have felt it our duty to say of the work of Dr. Granville, who, besides the long list of Romans appended to his name on the title page, has informed us of his deserts by modestly stating in a note, that Mons. Moreau de Jonnés did him the honor to assert, in a report to the French Institute in 1825, that "Dr. Granville, in my opinion, is one of the most skilful physicians in Europe in the knowledge of the phenomena of contagion—and in the means employed to combat it."

Of the motive that led to the republication of this work, we must profess our utter inability to imagine. So far as the London Boards of Health are concerned, no very profound interest can be felt in them by the American public ; and as to the nostrum—its composition is not even hinted at, nor is it advertised for sale in this country. We are informed in a note, that a recipe for this nostrum is left with a respectable apothecary in London, where the "alkaline drops" may be purchased; and this is the only information we have respecting the mode of procuring these wonderful preservatives against the cholera.—We are the more surprised at this reprint, as the foreign medical works furnished the American Faculty by these enterprising publishers, are usually selected with great judgment.

We have room only to record the titles of the following English Books, just received by Carter & Hendee, of this city.

An Outline of the Sciences of Heat and Electricity, by Thomas Thompson, M.D.

A. C. Celsi Medicinæ, Libri VIII., Ex recensione, cum notis. Ed. Milligan, M.D. Editio 2 da auctior.

Lectures on Natural History, by William Lempriere, M.D.

Forsyth's new London Medical and Surgical Dictionary.

Essays on Physiognomy, by I. C. Lavater, with Engravings.

An Introduction to the use of the Stethoscope, by Wm. Stokes, M.D.

Knox's Anatomy of the Bones of the Human Body.

The latter work contains numerous engravings of the bones, and is accompanied by others of the nerves and arteries, all drawn with great accuracy, and handsomely executed.

P. S. *Sickness in Maine.*—We learn from Hallowell (Me.), that some apprehensions are entertained by the Faculty that the *Spotted Fever* has broken out again in that flourishing town. Several cases (and one death) have occurred with the same symptoms as detailed in Dr. Page's account of the "spurious peripneumonic form" of the disease, alluded to in this Journal, Vol. 5, page 391. Whether these cases are merely sporadic, or the commencement of an epidemic, time only can determine.

Deaths in Boston for the week ending April 21, 30. Males, 14—Females, 16. Infantile, 2—scarlet fever, 7—measles, 8—intemperance, 1—dropsy on the brain, 1—consumption, 2—delirium tremens, 1—quinsy, 1—cancer in the breast, 1—brain fever, 2—inflammation in the bowels, 1—mortification, 1—convulsions, 1—croup, 1.

ADVERTISEMENTS.

ENGLISH AND FRENCH MEDICINES.

JARVIS & PEIRSON are constantly receiving the nice preparations of Mander, Weaver & Mander, and of Pelletier, such as Pil. Hydrargyri, Submurias, Hydrargyri, Confec. Sennæ, Carb. Ammoniæ, Ext. Belladonnæ, Ext. Conii, Antim. Tart., Aqua Ammoniæ, Magnesia Calc., Ol. Croton, Hydriodas Sodæ, Hydriodas Potassæ, Piperine, Strychnine, Iodine, Sulphate Quinine, &c. &c.

They have also, Concentrated Balsam Copaiva, prepared by a union of the oil of Copaiva with the Balsam. "It is four times the strength of the Liquid Balsam, and may be taken in pills, without the least inconvenience, neither communicating taste, or imparting odor to the breath; it is also retained without the least disquietude or uneasiness to the stomach."

"This article differs materially from what is termed the Extract, or Resin of Copaiva, being not in the least deteriorated in the preparation, nor at all weakened by admixture of any foreign substance for the purpose of giving consistence."—*American Journal of Medical Sciences.*

Also, Oil Copaiva, Oil of Cubebs, Fluid Extract of Sarsaparilla, &c. &c.

⁂ Physicians from the Country will be supplied with genuine Medicines upon the most reasonable terms. April 25.

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THE

BOSTON MEDICAL AND SURGICAL

JOURNAL.

VOL. VI.] WEDNESDAY, MAY 2, 1832. [NO. 12.

TREATMENT OF UTERINE IRRITATION.

In the treatment of this disease, the *indications* are, 1st. To correct the morbid condition of the uterus. 2d. To remove or mitigate the violence of troublesome symptoms in any individual case; and 3d. To restore tone and vigor to the general constitution.

In thus laying down the indications of cure, you will perceive that I have ventured to reverse, in some measure, the ordinary mode of procedure. I repeat to you, that the condition of the uterus, to the continuance of which I ascribe the various disorders enumerated in this lecture, has in most instances been altogether overlooked, or at least, if observed, it has only been in those cases which have had some of the characteristic symptoms present, in a strongly marked degree, such as excessive or very painful menstruation, or profuse leucorrhœal discharge; and even then, the condition of the uterus has been usually looked upon as a mere effect or consequence of the nervous or hysterical state of the entire frame, or in other words it has been considered as merely participating in a universally morbid sensibility. Hence the primary indication has commonly been to restore strength to the general system, regardless of the local disorder, although the ill success of the treatment founded thereon has at all times been frankly acknowledged; so much so indeed, as almost to have placed the disorders in question amongst the *opprobria medicinæ.* Having been led however to take a different view of the subject, I am necessarily induced to make the correction of the state of the uterus the first, or at least the principal indication, although of course the second indication, that of allaying troublesome symptoms, must often go hand in hand with, or in aggravated cases even take precedence of it. What then are the means best calculated to remove the morbid condition of the uterus, the irritable state of the organ? In the cases in which the uterine disorder has attracted attention, it has been recommended to bleed generally, to take blood by cupping from the loins, or by leeches from the region of the pubes, or from the pudendum; to purge, to give anodynes, to employ the warm bath, and to keep the patient in a recumbent position, even for months at a time. Of this kind are the principal remedies recommended in an excellent work recently published by a distinguished member of our profession—I mean Dr. Gooch. That gentleman treats of the complaint as it is attended with actual tenderness of the os uteri to the touch, when an examination is made *per vaginam.* He enumerates the remedies I have mentioned, but with those expressions of extreme distrust which mark the man of candor and of truth, and with that modesty which, when united to extensive experience, commands the assent of every reader. Now, that all these remedies may be occasionally serviceable, or even necessary, I am not presumptuous enough or inclined to deny : depletion, general or local, in the plethoric, and anodynes and laxatives in most cases ; yet speaking from experience, this object, this grand object is secured with much greater certainty, and much more speedily, by applications made directly to the uterus itself, and parts adjacent. The applications to which I allude, are *cold astringent washes*, injected *per vaginam* by means of a proper syringe. The ordinary womb syringe answers the purpose exceedingly well, but one of any convenient shape may be used, provided it be sufficiently large to contain from four to six or eight ounces of fluid. The injection should be introduced with such a degree of force, as shall secure its application to the upper part of the vagina, and to the os uteri ; and the operation should be repeated two, three, or four times a day, according to the circumstances of the individual case.

Either the mineral or vegetable astringents may be used ; the former however I prefer, as they do not stain the patient's linen, and consequently are not so much objected to. With respect to the precautions to be observed in the employment of these injections, very few are required beyond what common sense would dictate. Should the injection occasion smarting, which is by no means unfrequently the case at first, it may be diluted with water, or water alone may be used till the original tenderness subsides, which for the most part it will soon do. It will also be prudent to instruct the patient to relinquish it a little before the expected period of menstruation, and to resume it as soon as that period is over. These are almost the only precautions I have ever deemed it necessary to observe. Although in very irritable habits, and especially when the stomach is liable to be affected with pain and spasm, it may be as well to direct the wash to be used tepid at first, gradually diminishing the warmth till it is brought to the ordinary temperature of the patient's apartment, which will pretty uniformly be borne exceedingly well after a time, except perhaps during a few of the coldest months in winter. The wash I most frequently employ is the *Liquor Aluminis Compositus*, of the London Pharmacopœia ; that is, two drachms of *alum*, and two of *sulphate of zinc*, to a pint of water. This practice must be persevered in for a length of time, proportionate to the obstinacy of the case and the effects it produces. Indeed, I myself recommend females never to relinquish it, but to employ it from time to time, as long as they continue to menstruate, to prevent the recurrence of the disorder, and its unhappy consequences. I have said that the patient should desist from the use of the injection, a little before and during the menstrual period ; but she ought also to be specially cautioned against using any violent exertion, or undergoing any unusual fatigue at that time, as nothing so completely thwarts your purpose as imprudence committed whilst the irritable uterus is performing its functions.

When the uterine irritation is characterized by frequent and excessive flow of the menses, I have directed the patient to remain quiet in or on the bed, and to desist from the wash during each recurrence ; not having ventured to carry the practice to the extent of attempting to restrain even such excessive discharge by local astringents. But when there is decidedly painful menstruation, or pain felt in the *womb*, *loins*, or *thighs* before the appearance, although there be no leucorrhœal discharge whatever in the interval, I nevertheless apply the cold wash to such subjects, precisely in the same manner as if such leucorrhœal discharge were present, on the principle that this leucorrhœal discharge is itself a mere symptom or effect of the state of uterus and neighboring parts, which I am anxious to remove. Such is the *local* treatment that experience and observation have led me to adopt, and which, after a long trial, I venture, with some confidence, to recommend to you. It is just possible that circumstances not noticed by me may occasionally occur to interfere with or forbid the practice ; but, I speak of generalities, and not of universal principles—universal principles are unknown in our profession.

The second indication—*to allay or remove troublesome symptoms*—must, of course, be variously fulfilled, according to the circumstances of the particular case, but the remedies employed for the purpose will necessarily co-operate with the local treatment to afford relief to the patient ; unless, indeed, the severity and character of the troublesome symptoms be such as to render the *immediate* application of the wash either doubtful or hazardous—as *e. g.* when the stomach is the seat of severe spasm, or the bladder or abdomen generally acutely painful, in which cases the second indication must take precedence of the first. Should the symptoms merely consist of the susceptible state of body and mind before described, or should this be accompanied by that modification of derangement of the digestive organs characterized by flatulency and irritability of the stomach and bowels, the general treatment need be very simple. I say nothing of *bloodletting*, as the propriety or impropriety of this must be apparent from the state of the circulation, always keeping in mind that such subjects bear bleeding badly, especially in large quantity, and that mere *frequency* even with *sharpness* of the pulse, is, in the highest degree, fallacious : a full, hard pulse, with considerable heat of skin, and more or less throbbing or pain in the head, will point out the expediency of a moderate bleeding. *Purgatives*, or rather *Laxatives*, ought never to be neglected, but much caution and judgment are required in their proper selection and application. The bowels, it is true, are generally costive, but it must be remembered that they are as uniformly in a weak and irritable state ; hence those purgatives should be selected which give the least pain, and have the least tendency still further to weaken their tone. Watery saline purgatives are ill suited to the majority of such cases ; they often perform their office imperfectly, and although they may not produce much pain, which they often do in such subjects, they, nevertheless, tend, by frequent use, further to impair the tone of the bowels, and to increase the disposition to flatulency. Except, therefore, at the commencement, in plethoric subjects, or where the disorder exists in connexion with menorrhagia, the saline purgatives are not commendable. *Castor oil*, when it agrees with the patient's stomach, will be found more generally serviceable, perhaps, than any other. In many cases, the warm and resinous purgatives, though at all times more irritating, answer exceedingly well, emptying the bowels of their fæculent contents, and expelling flatus without leaving any increased tendency to flatulency afterwards, as is the case with the watery saline purges. A little *Compound Extract of Colocynth*, or equal parts of this and *Extract of Rhubarb* with a little *Extract of Hyoscyamus* to obviate griping ; or the above extracts may be given with a little *Blue Pill*, should a mercurial laxative be indicated by the appearance of the secretions. Calomel very often gripes severely, whether alone or combined ; yet such is the variety of constitutions met with, that the Compound Extract of Colocynth with Calomel often proves the most effectual and not the most painful purge. One or other, then, of these laxatives may be necessary once or twice a week.

In the case I am now treating of, that is, where there is no abdominal pain, the medicine that I have found to afford the greatest relief is unquestionably the *Ammonia*, given either in common mint or camphor julep, alone or with a few grains of *Magnesia ;* about ten or fifteen minims of the *Liquor Ammoniæ Subcarbonatis*, with from eight to ten or fifteen grains of *Subcarbonate of Magnesia* two or three times a day. If it create any approach to pain in the stomach, or a disagreeable sense of heat there, these effects may sometimes be obviated by adding about half a drachm of Tincture of Hyoscyamus, or a drachm or so of the Tincture of Hops, to each dose. This ammoniacal mixture seems, by its stimulus, to expel flatus, and thereby to afford relief to many of the uneasy and unhappy sensations, and to raise the spirits of the patient. I have often given the Ammonia along with the Mistura Myrrhæ of Guy's Hospital, an ounce or a dose of which contains, I believe, about twenty grains of Myrrh, and is made with the Decoction of Liquorice root.

But suppose that, with more or less of the general symptoms, we have pain under the left mamma, or in any of the other situations pointed out, what modification of treatment ought we then to adopt ?

The pain under the left mamma is of such frequent occurrence, that it becomes a matter of the very first practical importance to bear it carefully in mind when called upon to treat the disorders of young females. There is no local pain more frequently mistaken, and there is, perhaps, no local disorder so maltreated as this. Over and over again have I known patients blooded, cupped, blistered, and anointed with acrid ointments, for months in succession, not only without relief, but with the most serious injury to their general health, whilst the uterine irritation has been altogether overlooked. Indeed, in thus declaring and denouncing such a mistake and such bad practice, I candidly confess that I am only declaring and denouncing "*quæque ipse miserrima vidi, et quorum pars magna fui.*" In truth, it was the frequent occurrence of this obstinate and intractable pain that first led me to a close and minute investigation of the subject of uterine irritation, having, like others, repeatedly blooded, cupped, and blistered in vain in such cases. Since, however, I have been guided in the treatment by the principles I have ventured to lay before you, my success has been much more certain and decided ; and when the treatment founded thereon has not fully answered my expectation, it has at least been attended with the negative advantage of inflicting no unnecessary injury on the patient's general health.

In pointing out its non-inflammatory nature, do not imagine that I contend for the impropriety of bleeding or cupping or blistering in every instance. On the contrary, in plethoric subjects, one or two general or local bleedings may occasionally prove of service; but merely, I believe, as such practice might be expected to afford relief in an ordinary colic, or any other similar painful affection. Depletion, however, is very far from being, in general, necessary, and probably will, in a majority of cases, be positively hurtful, teazing and exhausting the patient without any adequate or permanent benefit. I have known Cupping, Leeches, a Blister, or an Opiate or Belladonna plaister, afford relief; but they all often fail, and will generally do so, or at least be merely followed by a temporary respite, unless the condition of the uterus, and other circumstances I have pointed out, be attended to. Hot fomentations to the part will sometimes afford relief, but are attended with the same uncertainty as the other local remedies mentioned. Under the use of the injection, however, and the ammoniacal mixture, with Tincture of Hyoscyamus, or with three, four, or five grains of the Extract of Conium, in the form of pill, alone or with a grain or so of blue pill, according to the state of the secretions, the pain will generally yield, although the patient, as might be expected, will for a longer or shorter period be liable to a recurrence, until the original irritation, and its effects upon the abdominal viscera, shall have been overcome by a steady perseverance in the use of appropriate remedies. In some instances the ammonia cannot be borne, when the plain Camphor, or Mint julep, may be substituted, with half a drachm or so of the Tincture of Hyoscyamus; or four or five grains of the Extract of Conium may be given in the form of pill twice or thrice a day. In other cases, again, you may try six or eight drops of Batley's Liquor Opii Sedativus at bed time, unless it offend the stomach or the head. Should it constipate the bowels, proper laxatives must be had recourse to, in order to obviate such an effect; I prefer, myself, the Conium, or Hyoscyamus. Unless, however, it happen thus to disagree with the patient, the ammonia will answer best, guarded, of course, by the anodynes.

In those cases in which the pain shifts its seat from time to time, I limit my *external* remedies, generally, to hot anodyne fomentations; such as the Decoction of Poppy-heads, or what often answers very well, the hot Infusion of Chamomile Flowers, the flowers themselves being inclosed in folds of flannel, the more effectually to retain the warmth. I may also here observe again, that this tendency to shift its seat, together with the unsteadiness in the degree of the pain, form the most important diagnostic indications; whilst in most instances, we shall find, on inquiry, that the patient had suffered more or less from the complaint for some time before she applied for advice. Attention to these circumstances will materially assist us in our diagnosis, not only in these, but in the other painful or neuralgic affections attacking the abdominal viscera.

When the pain is situated in the *right hypochondrium*, or under the margin of the ribs of the right side, it is, as I have before said, repeatedly mistaken for, and treated as, hepatitis, and many are the times that I have known poor delicate women blooded, cupped, blistered, and salivated on this supposition, till they have been brought almost to the very brink of the grave. It is to be distinguished by the symptoms and circumstances already pointed out, and when ascertained, is to be treated upon precisely similar principles to those so minutely detailed. In these cases, patients sometimes tell us that our medicines, especially mercurial and resinous purgatives, greatly aggravate the pain of the part during their operation. Cupping, Leeching, and Blistering, will each occasionally, but only occasionally, afford relief; whilst, generally speaking, I would say, that in this form of the complaint hot anodyne fomentations, assiduously applied, are more decidedly beneficial than in the former case, but in other respects the same means may be pursued. In some cases, four or five grains of Dover's powder, twice a day, will afford relief; in other instances, the more powerful combination of calomel and opium has been tried with effect. The calomel, however, ought to be given with great reserve, and never, if possible, to such an extent as to affect the system; in short, in all cases, the less violent measures we employ the better.

When the pain seizes the track of the colon on either side, the same treatment will apply, as it will also when the stomach becomes the seat of the pain; unless, indeed, severe spasm accompany it, when more active measures must be had recourse to, as a full dose of Liquor Opii Sedativus, or even a full dose of *Laudanum* and *Sulphuric Æther*, as I shall presently show.

I have said that the pain occasionally attacks the whole of the belly, exactly simulating acute peritonitis. This may be attended either with a flaccid or a tympanitic state of the intestines, the latter proving by far the most painful of the two, the slightest touch causing the patient to cry out.

This generally diffused pain is not unfrequently associated with that modification of uterine irritation marked by excessive menstruation, both in point of quantity and frequency. But in such cases, whether with or without menorrhagia, it will require all your tact and discernment, and what is more, it will require all your philosophy and forbearance, to abstain from copious depletion under an apprehension that it may be peritonitis. The history of the case will generally raise a doubt, and will often bring conviction; but if a doubt do really exist, it will always be prudent to err on the right side, and treat it as inflammation.

When *unaccompanied* by excessive menstruation, the same general rules of treatment are to be observed as have already been detailed; moderate bleeding if much plethora and headache, with a full pulse, prevail; and the free use of laxatives and fomentations. In both forms of the complaint, to relieve the pain in this situation, I hold the Liquor Opii Sedativus to be by far the most efficient remedy, as well as attended with the least inconvenience to the patient. With due attention to the bowels, therefore, six, eight, or ten drops may be given every night, or every night and morning, according to the urgency of the pain.

When attended with excessive menstruation, there very usually prevails a plethoric condition of such irritable subjects, so that a moderate bleeding will commonly form a very good mode of commencing our practice: or if there be much forcing, or bearing down, the patient may be cupped from the loins. In all cases of this kind, too, the patient during the flow, and for a short time before the expected recurrence, should be strictly enjoined to remain in the horizontal posture ; to be kept cool, and to live upon low and bland diet. Nothing so certainly or so greatly aggravates cases of menorrhagia, even when without abdominal neuralgia, as the ill-founded and ill-judged practice of giving tonics and stimulants, on the erroneous supposition that such excessive discharges are the result of weakness. Repeatedly have I known the most serious mischief result from the practice here pointed out ; patients having been given Bark, Port wine, and cold Porter, merely because they complained of great debility, and because such complaints of debility have tallied with the preconceived notion of the practitioner, that the disease had its origin in weakness. You must be careful to distinguish a *weak and relaxed*, from a merely *irritable*, or a *delicate* and *irritable* habit ; it is the latter in which you most frequently meet with the menorrhagia, of which I now speak. The excessive discharge is intimately connected with such irritability of the system at large, and of the uterus in particular ; tonics and stimulants only tend, therefore, to produce excitement ; to augment the action going on in the irritable uterus, and thereby to increase the sufferings and exhaust the strength of the patient. As far as the discharge is concerned, therefore, your object is to allay the vascular excitement by moderate depletion and purging, and to allay irritation by anodynes and rest. A free action on the bowels exerts so powerful an influence over excessive uterine discharge, that I am often induced to administer divided doses, either of the Magnesia and Salts mixture, or of the Salts dissolved in the Compound Infusion of Roses ; endeavoring to obviate the increase of the neuralgic pain of the belly, which is liable, when it prevails, to be aggravated by the Salts, by giving at the same time about five grains of Extract of Conium or Extract of Hyoscyamus, three times a day instead of the Liquor Opii Sedativus. In general, however, other laxatives may be given occasionally, to maintain a free discharge from the bowels, and to counteract the effect of opiates, should we determine upon a trial of them ; for this purpose Castor oil, or Calomel and Rhubarb, may be given ; or the object may be, to a certain extent, accomplished by the use of glysters. If in spite of our depletion, laxatives, and rest, the flooding still continues to prevail, without neuralgia of the abdomen, I generally direct the patient to apply cold vinegar and water, by means of a sponge, to the lower belly, two or three times a day ; employing at the same time anodynes, or anodyne glysters, in order to allay the irritability of the womb itself.

If you have flooding alone, then, without neuralgia of the belly, you will bleed generally or locally, according to the state of the patient's system at the time ; keep up a free action on the bowels ; keep your patient cool, and on low diet, and administer anodynes, either by the mouth or by glyster, with or without cold sponging, according to the severity of the case. Should flooding prevail along with the neuralgia of the belly, precisely the same remedies, with the exception perhaps of the cold sponging, will be required ; whilst, if the neuralgia exist alone, the case becoming much more simple, must be treated on common principles ; *i. e.* general bleeding, according to the degree of excitement of the heart and arteries: perhaps leeches to the belly, hot fomentations, laxatives, and anodynes, either given by the mouth, such as Liquor Opii Sedativus, Conium, or Hyoscyamus; or in the form of glyster, as thirty or forty minims of Laudanum, with a little thin starch. Even in flooding cases I never give the lead, as I never fail by more gentle means to subdue the disorder, and I have known the lead induce severe colic.

I need only observe further, that, if you should feel disposed to try the Oleum Terebinthinæ, I should consider it best suited to the general neuralgic state of the belly, without flooding or excessive menstruation in any form. From two drachms to half an ounce may be given with three or four drachms of castor oil. I am, however, averse to it myself, from its liability to offend the stomach and be rejected, but more especially from its tendency to act with violence on the kidneys.

Such are the means which I have found most frequently of service in alleviating the more prominent and distressing symptoms attendant upon uterine irritation; means, I confess, often insufficient for the purpose, unless long persevered in, and this too in conjunction with the local treatment already mentioned. Many other medicines and expedients will undoubtedly suggest themselves in particular cases, as Camphor, Musk, the Warm bath, and such like; or should the secondary local pains described not be considerable, the *fetid gums*, especially *Assafœtida*, will often afford some, though tardy relief. Indeed these fetid gums have attained a high character as *antihysterics*, but appear to me, chiefly, if not exclusively, adapted to relieve some of the symptoms more particularly connected with the condition of the bowels;—they expel flatus, raise the spirits, and moreover appear to restore tone to the alimentary canal, provided the original source of the evil be attended to at the same time. In the less painful forms therefore of the disorder, these fetid gums are worth a trial, and will often afford considerable relief to the feelings of the patient.

Much of what has been said, merges in the *third indication;* viz. to restore strength and vigor to the general habit. Of the best means of accomplishing this I need say very little, beyond remarking that the *early* use of *tonics* has been extensively adopted, and has consequently been given a fair trial, whilst almost all are agreed as to the very unsatisfactory results, in a large majority of cases; the cause of which you will now be able, in some degree, to appreciate; I mean, of course, inattention to the local irritation, from which I suppose the whole mischief to proceed. In the highly irritable and susceptible state of the body at large, and of the alimentary canal in particular, the more stimulating or irritating tonics cannot be borne, creating sickness, pain or uneasiness at stomach, loss of appetite, headache, and divers unhappy sensations not easily defined by the patient. Chalybeates not only offend in this way, but are extremely apt to excite the uterus, so as to produce excessive menstruation, if it did not previously exist, or to aggravate it, if it have already prevailed. Exceptions do undoubtedly occur, but the objections to them stated are founded on personal experience. The *Sulphate of Zinc*, however, may sometimes be given early, with advantage, provided it do not offend the stomach. A grain to begin with may be given night and morning, alone, or with a few grains of the Extract of Conium, or of Hyoscyamus, or with a little of the Pil. Galban. Comp.; or it may be given along with two or three grains of the *Extract of Gentian*, or *Extract of Bark*; or these latter may be given without the Zinc. Any of these may be tried, and persevered in, till the local disorder and the most prominent of the general symptoms shall have been subdued to a certain extent, when less reserve may be observed as to the nature of the tonics we employ; the chief of them are *Bark*, *Bitters*, *Chalybeates*, the *Cold Bath*, and *Country air*.

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TREATMENT OF EPIDEMIC CHOLERA.

In the Medico-Chirurgical Review for January, 1832, it is estimated by the Editor, that rather more than a third of the cases of Epidemic Cholera, since it has prevailed in Europe, have proved fatal. Had the account been continued two months later, the result would have been still more unfavorable, since on the 6th of March, the date of the latest returns which have reached this country, there had been reported 300 cases in London, and 178 deaths, showing that more than one half of the subjects of the disease, in that city, had fallen victims.* We have nothing, therefore, to learn from the practice of the most distinguished physicians in Europe, except to notice their errors, and to avoid the rocks and shoals upon which they have made shipwreck. Let us turn from these scenes of horror to the writers of our own country.

As every symptom of the European disease, and almost every combination of the same symptoms, have been frequently observed in their greatest urgency and severity, and very often treated with success, during several of the epidemics which have appeared in the Eastern and Middle States, as well as in Canada, within the present century; we must turn to the writers of our own country, if we expect to find any valuable information, which may serve as a guide, in case of the appearance of the cholera among us. The physicians who have been thirty years in practice, and in the habit of reading the medical productions of our own country, must be familiar with American authorities. It is, however, sometimes difficult for the younger part of the Profession to know what books to refer to, when they are making research upon a particular subject; and from their not being familiar with the periodical writings which immediately preceded them, they are often less acquainted with the medical history of the last thirty years, and especially of their own country, than with that of any other period since Physic has been a regular profession.

The following list, though acknowledged to be quite imperfect, is believed to contain the principal authorities upon the disease at first denominated *spotted fever*, but since, much more appropriately named *typhus syncopalis* or *sinking typhus.*

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* Since the above was written, intelligence is received as late as March 28th, which bring the most alarming report of the want of success in the London practice. Out of 1365 cases, there have been 742 deaths! and yet, depletion by the lancet is persevered in!!! It is very probable that still more alarming accounts may arrive before this is seen by our readers.

1. History of a singular and very mortal Disease, which lately made its appearance in Medfield, Mass. By Drs. Danielson and Mann. Medical and Agricultural Register, Boston, May, 1806. This is the earliest account of sinking typhus, as a distinct disease. It was republished in Dr. North's treatise,

2. Dr. North's Treatise on Spotted Fever, besides his own observations, contains most of the fugitive articles which had been published at the time, and ought to be read by every practitioner. It was printed at New York. The date is not recollected.

3. Dr. Strong's Dissertation on the Disease termed Petechial or Spotted Fever. Hartford, 1810.

4. Dr. Fisk's Remarks upon Spotted Fever as it prevailed in Hartford, Conn. in the year 1809. Published in the Transactions of the Physico-Medical Society of New York, Vol. 1. 1817. These two works describe a variety as severe as epidemic cholera.

5. An account of Petechial or Spotted Fever as it appeared in Stanstead, Lower Canada, in 1811, by Drs. Whiteker and Lyman.

6. Dr. Hale's History and Description of an Epidemic Fever, commonly called Spotted Fever, which prevailed at Gardiner, Maine, in the Spring of 1814. Boston, 1818.

7. Report of a Disease commonly called Spotted or Petechial Fever, read, accepted, and approved, at a meeting of the Counsellors of the Massachusetts Medical Society, June 21, 1810.

8. Dr. Comstock's Treatise on Febrile Diseases, read before the State Medical Society of Rhode Island. 1814. Dr. C. now resides at Lebanon, Connecticut, and possesses a manuscript giving much further details of sinking typhus, illustrated by several striking cases.

9. Typhus Syncopalis, or Sinking Typhus, or the Spotted Fever of New England, by Thomas Miner, M. D. Middletown, Conn. 1825. It has been copied and republished, abridged or entire, in four or five other works, the fullest of which, with additional notes, is in the American Medical Recorder, Vol. 12, July 1827.

10. There is also, by the same writer, in the American Medical Recorder, Vol. 13, April 1828, page 285, an Essay on Malignancy, which applies to diseases of this description.

11. The judicious and valuable account of Spotted Fever, by Dr. Page, is contained in Dr. Thacher's Modern Practice.

12. In the Notes to Gregory's Practice, by Drs. Potter and Calhoun, will be found the best digested account of Typhus Syncopalis, that is to be met with in any systematical work.

13. The latest original article upon Typhus Syncopalis is by Jared Potter Kirtland, M. D. of Poland, State of Ohio. It contains a very lucid account of the disease, as it appeared in the County of Trumbull in that State, in the year 1827. See American Medical Recorder, Vol. 15, July 1829, page 449.

Whoever will peruse these works, or even confine himself to the abridged accounts of Typhus Syncopalis, as contained in the writings of Drs. Thacher and Calhoun, will be immediately struck with the similarity of the disease, in its severest form, to epidemic cholera. The fever in both cases is of the same type, they are both sinking diseases, in which the system has received such a shock during the cold stage, that the succeeding period of reaction is not developed at all, or at best is but very feeble and imperfect. The vital powers appear to be sunk and exhausted at once, as if by lightning, carbonic acid, prussic acid, or an overwhelming dose of some animal, vegetable, or mineral poison. The writer once saw a person die, in consequence of taking, to commit suicide, a drachm or two of arsenic. This case could not have been distinguished from some of the varieties of typhus syncopalis, or of epidemic cholera, and its nature would not have been recognized had it not been soon discovered that arsenic was the cause. Diarrhœa, emesis, catharsis, colic, spasms, leaden hue and coldness of skin, absence of pulse, syncope from an erect position, extreme clearness of intellect, as well as delirium and coma, diminution or suppression of common secretions, hippocratic face, and above all *gastric sinking*, or a deathlike anxiety at the stomach, are among the prominent symptoms that are frequently found in both diseases. If there exists any local inflammation in either disease, it is as atonic and passive as the gangrenous affection in the throat of the severest cynanche maligna, or the worst carbuncle in the plague, and is no more to be cured by depletion and evacuation in one case than in the other.

Seeing the utter failure of the European physicians, in their treatment of the present epidemic, it behooves our practitioners to make themselves masters of all the principal writers of their own country, who have been familiar with cold, sinking febrile diseases. Their writings are not theories or hypotheses, but histories of facts, observed by as impartial and respectable witnesses, as the world affords upon any professional subject. *Quæquæ ipse miserrima vidi.* CELSUS.

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BOSTON, MAY 2, 1832.

PHYSIOLOGY.

In the absence of other interesting topics, we venture to recall the attention of our readers to experimental physiology, which, in the late press of other matters, has for some months scarcely been mentioned in our pages. We have before us a short paper read to the Royal Academy of Sciences in Paris, by M. Flourens, and published in their tenth volume, on the action of the spinal marrow upon the circulation. We shall present an abstract of this paper nearly in the author's own words.

1. It is well known to have been the opinion of Le Gallois, and one which has gained much celebrity, that the spinal marrow is the seat of the motive power of the heart.

2. In 1823, I performed some experiments which went to show, first, that the circulation, which in adult animals is universally suspended by

the destruction of the spinal marrow, survives this destruction for a certain time in animals just born ; second, that even in adult animals, as Wilson Philip had before proved, the circulation will survive this destruction, provided respiration be artificially maintained.

3. Thus in the young animal, in whom respiration is less necessary to circulation, the spinal marrow is also less so ; and in the adult animal when the respiration is artificially maintained, the circulation survives the loss of the spinal marrow. It is then because it is essential to respiration, that the spinal marrow is essential to circulation.

4. From this it would follow, that if there were an animal in which the respiration was independent for a certain time of the spinal marrow, the circulation ought to be equally so.

5. Such an animal is the fish : I have shown, in former experiments, that we may destroy the spinal marrow entirely in fishes without suspending the respiration ; since it is not from the spinal marrow in this animal, but from the medulla oblongata, that the nerves which go to the gills are derived.

6. We may also destroy the spinal marrow in fishes, without suspending the circulation.

7. I have destroyed successively in several carps and barbets the whole spinal marrow without touching the medulla oblongata ; in all these fishes, the respiration and circulation have for a long time survived this destruction. The movements of the trunk and its appendices were indeed destroyed ; but the head and the gills continued to move as usual ; and the circulation still continued, even at the extremity of the trunk, more than half an hour after the total destruction of the spinal marrow.

8. On the other hand I have always seen in other classes the circulation survive the destruction of all the parts of the spinal marrow which the respiration survived : the destruction of the lumbar medulla, for example, in birds ; that of the lumbar and costal medulla in mammiferæ. In many birds, such as pigeons, chickens, &c. I have destroyed the lumbar medulla, and the circulation has continued several hours even in the hind legs. Finally I destroyed in several frogs all the spinal marrow except the single point of medulla cervicalis, whence spring the nerves which go to the neck, that is, which supply the respiratory apparatus of these animals ; and the circulation as well as the respiration has survived a long time.

9. It appears, then,—1st. That we may destroy with impunity to the circulation all the points of the spinal marrow whose integrity is not essential to the respiration, and that when the latter function is independent of the spinal marrow, as in the fish, the former will be found equally so. 2. The spinal marrow has upon the circulation as well as on the respiration only a relative and variable action. 3. In the same manner and by the same points by which it influences the respiration, the spinal marrow

affects the circulation also ; and, 4. It is not in this that resides the essential, still less the exclusive principle of the circulation.

By *impunity*, as the author afterwards explains, he means only so far as one absolute or exclusive principle of action is concerned : for the destruction of the spinal marrow always weakens at once the circulation, and at the end of a certain time determines its abolition ; but this is not in virtue of any special action on the heart, but in consequence of the general changes induced in the system.

Geographical Relations of Yellow Fever.—Yellow fever shows a most decided predilection for the northern hemisphere. The equator seems to present to it an insurmountable bar. Yet at Rio Janeiro, in Brazil, at places in Chili and Peru, and in certain localities on the coasts of Africa and Asia, all the conditions of atmosphere and soil most favorable to the disease would seem to exist in a state of concentration.

It cannot be on account of the greater heat of North America that the complaint is so peculiarly attached to that quarter, for Brazil and Peru are of a temperature infinitely higher than is to be found in the United States, nor are they destitute of changes or of extreme humidity. Guayaquil and Panama, which are situated but a few degrees north of the line on the west coast of America, are ravaged with yellow fever, while Lima, fourteen degrees south, as Martinique is fourteen degrees north, is very healthy, though far from being very cleanly.

What have the winds to do with the question ? Their direction and intensity seem to have much concernment in it, yet it is difficult to state anything with precision on this point. We can only say, that the prevalent winds on the west coast of South America, or the south-westerly, come from the ocean, as at the Antilles, when the trade-winds similarly come from the main. Has the elevation of the country anything to do with it ? It would seem not, for Avica, in Peru, is not only situated on the flat low sea-coast, but is exposed to a breeze which blows perpetually off an island covered thickly with the dung of sea-birds, diffusing a stench which infects the air around the whole country to a great extent. Avica, however, is entirely free from the desolating malady. Quilia, another town of Peru, is also on the coast, and near a river : it is an extremely hot situation, yet the yellow fever never shows itself there. At Lima, the unseemly nastiness of the streets is remarkable : dead dogs, asses, and mules, are left there to putrify, without removal, even after the birds of prey have devoured everything but the bones. Nor is the disposal of the human body better cared for in that region ; the graves in the immediate vicinity of the city are quite exposed, and uncovered with earth. The humidity of the atmosphere, too, is extreme and invariable : the sky is perpetually charged with clouds, and the sunbeams can never reach the soil : in short, neither are there here any occasional brisk gales to dissipate the malaria which is constantly accumulating. Yet, with all this, yellow fever never makes its appearance at Lima ; nor do we find the inhabitants particularly disposed even to gastric affections, bilious complaints, or any of the disturbances which seem to have relationship to the disorder.

This preference of yellow fever for the northern hemisphere is still further countenanced by what occurs in the old world—we allude to the frequent epidemics of Leghorn, Barcelona, the coast of Africa, and the almost annual affliction of Cadiz.—*From the Notes of M. Sper, R.N. of France.*

External Application of Croton Oil.—M. Andral has recently published an account of some of the experiments which he has been making with the croton oil. In more than thirty cases he had it rubbed upon the skin of the abdomen, thighs, or arm pits, in quantities varying from four to twenty drops; sometimes pure, sometimes mixed with almond oil. These frictions were made under different circumstances, and in some instances certainly under conditions favorable to absorption; yet, to his astonishment, no appreciable result referable to such effect was met with, except in one instance. On the other hand, in all the patients an eruption appeared on the parts where the friction had been employed, differing in degree according to the quantity of oil, and the part rubbed, and the sensibility of the individuals. The following were the general phenomena:—A few hours after the friction (supposing this to have been employed for some minutes) the patients experienced a smart tingling in the part. In some this sensation was transient, in others prolonged, but never to such an extent as to produce troublesome nervous disturbance; at the same time there appeared a great number of little red points, at the apices of which there soon were perceptible little pustules, which within from thirty to fifty hours had become fully developed. Many of these became united, and then formed large patches, filled with white opaque fluid. The eruption increased for three or four days, after which it remained stationary, and subsequently died away like smallpox. In some cases where the oil was applied to the face, the eruption was more copious and intense than elsewhere.

Thinking that this form of counter-irritation might prove serviceable in cases which had resisted other means, M. Andral had recourse to it; in many of these it also failed, but in others the improvement was so rapid, as to show the friction to be a therapeutic agent of considerable value. Among the successful cases are enumerated old rheumatic pains, obstinate sciatica, numbness of one side of the face, and chronic inflammation of the alimentary canal.—*Gazette Medicale.*

Biliary Fistula.—At a late meeting of the Academy of Sciences in Paris, M. Civiale read an account of a case of biliary fistula, exhibited by a patient now in the Hôpital Necker. The subject is an officer, who, in the campaign of 1812, received a thrust with a lance in the abdomen, and was left for dead on the field of battle. The wound had penetrated the cavity on the right side, about two inches from the umbilicus. There resulted from this a ventral hernia, which was restrained by means of a circular bandage round the body. Since that time the patient has lived in an alternate state of health and suffering till the autumn of 1831, when a urinary calculus having made its appearance, he came to Paris, to be treated at the hospital above mentioned. The digestive organs were found to be much impaired; and the liver was so much enlarged as to extend to the umbilicus. It soon became apparent that this viscus contained purulent matter; and the abscess was subsequently opened with all due care. The fluid evacuated did not present the usual characters of pus coming from the liver. When the suppuration had nearly disappeared, a greenish fluid escaped from the opening; and at length one day, after a violent fit of colic, a considerable quantity was evacuated, with regard to which there could be no mistake in taking it for bile. From this time a similar discharge has occurred at each dressing. Loss of appetite, and sleep, and great emaciation, were the immediate consequences of this evacuation of bile. Three days after the stools became white, but there was neither constipation nor looseness. The digestion, however, became gradually restored, but the skin has not yet regained its natural appearance. About a wineglassful of bile is evacuated in the course of twenty-four hours ; the quantity, however, during the two days preceding the date of the narrative had become diminished. The operation of lithotrity was performed notwithstanding the above complication, and apparently with complete success.—*Ibid.*

Endermic Application of Morphia in Cases of Rheumatism of the Joints.—Messrs. Trousseau and Bonnet have recently published in the Archives (Nov. 1831), many cases of rheumatism of the joints, which were successfully treated in this manner. For the purpose of detaching the epidermis, they recommend a pommade composed of equal parts of concentrated ammonia and lard, and one fifth part of suet. This application is preferred to cantharides, on account of the rapidity with which it acts, and the facility with which its effects are limited. The acetate, hydrochlorate, and sulphate of morphia were used ; but the two latter were particularly selected, for their greater solubility, and consequently more ready absorption. The spot chosen for the application of the remedy should be as near the seat of pain as possible. The quantity of morphia applied should be from one to two grains, according to the effects produced.

Diagnosis of Hydrocele.—M. Segalas recently submitted to the Académie de Médecine a new method of ascertaining the transparency of the parts in doubtful cases of hydrocele : he applies to the scrotum one extremity of the eye tube which is used for exploring the urethra, and puts his eye to the other, and he thus detects the existence of fluid, if it be present. The result is explained by the isolated condition of the eye, the perpendicularity of the rays of light transmitted through the tube, and the pressure of the instrument against the scrotum. M. Roux doubts the utility of this method in certain cases, as when the tunica vaginalis is much thickened.—*Gaz. des Hôpitaux.*

The Editor of the London Medical Gazette observes, and we think correctly, " that M. Roux's objection proves nothing ; and perhaps the only circumstance that would tend to depreciate the utility of the new method is, that it enables us to see *too well*,—to discover transparency where such a thing could be least expected. With the tube and a candle, light may be perceived through the palm of the hand."

Corrector of Opium.—According to M. Puchelt, a German physician, the sulphate of soda is an excellent corrector of the unpleasant effects of opium, given in the proportion of a scruple to half a grain of opium. This dose may be repeated two or three times a day. In combination with Glauber's salt, opium, he says, may be administered in cases where slight plethora, local or general, prevents recourse being had to opium alone ; in obstinate hemorrhages, principally, this mixture will produce the happiest effects. But if sulphate of soda prevents the congestion which opium sometimes produces, M. P. says that there is another article which corrects its narcotic, without diminishing its sedative effects ; this is the castor. The combination of opium and castor he considers very useful in cases of hysteria.—*Ibid.*

Combination of Nitre and Calomel.—M. Burdach states, in a recent German Journal, that the addition of nitrate of potash prevents calomel from producing salivation, the nitre causing its prompt expulsion by stool. This combination he also asserts to be a powerful derivative, and relieves the head, the chest, and the liver, more effectually than either of them will do separately. Certain diseases, as hydrocephalus, croup, &c. he adds, require large doses of calomel, and if this medicament is not eliminated from the system, it becomes a poison : the addition of nitre prevents this unfortunate result.—*Gazette Médicale.*

The Medical College of Ohio appears to be in a flourishing condition. We notice by a recently printed catalogue, that 150 gentlemen attended the medical courses there the past winter. Of these, Ohio sent 60 ; Kentucky, 32 ; Virginia, 13 ; Mississippi, 8 ; S. Carolina, 2 ; Indiana, 5 ; Pennsylvania, 6 ; Louisiana, 4 ; Missouri, 3 ; Tennessee, 11 ; Michigan, 1 ; Illinois, 2 ; New York, 1 ; Maryland, 1 ; Bermuda, 1. A Hospital and Lunatic Asylum, so indispensable to the medical student, are among the advantages offered by this western college.

The Spotted Fever is prevailing at New London, Connecticut.

Whole number of deaths in Boston for the week ending April 28, 40. Males, 16—Females, 24. Stillborn, 2.

Throat distemper, 3—lung fever, 3—scarlet fever, 6—unknown, 2—consumption, 6—measles, 4—pleurisy, 1—croup, 1—convulsions, 1—infantile, 1—jaundice, 1—burn, 1—dropsy, 3—intemperance, 3—cancer, 1—delirium tremens, 1—hooping cough, 1—ileus, 1.

ADVERTISEMENTS.

MEDICAL BOOKS.

A PRACTICAL Formulary of the Parisian Hospitals, exhibiting the prescriptions employed by the Physicians and Surgeons of those establishments; with notices of the various Hospitals, and copious remarks upon the Medical Doctrines of the Practitioners who preside in them. By F. S. RATIER, M.D., Doctor in Medicine of the Faculty of Paris, and Corresponding Member of the Royal Medical Society of Bordeaux. Translated from the French, with Notes and Illustrations, by R. D. MCLELLAN, M.D., Licentiate of the Royal College of Surgeons, London. ALSO,—Magendie's Formulary, for the preparation and employment of the New Medicines,—such as Strychnine, Emetine, etc.—Translated from the French, with an Appendix, containing the experience of the British Practitioners with many of the New Remedies. By JOSEPH HOULTON, F.L.S., Member of the Royal College of Surgeons, London; Associate of the Medico-Botanical Society.

The American Editions of the above valuable works, in any quantity, as also the most popular of the medicines therein mentioned, are for sale at the store of the subscribers, who have for sale an extensive assortment of Surgical Instruments, Chemical Substances and Apparatus, at wholesale and retail, on satisfactory terms.

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DISSECTION VIEWED WITH REFERENCE TO THE RESURRECTION.

> "Si trapassamo per sozzo mistura
> Dell' ombre e della proggia, à passi lenti,
> Toccando un poco la vita futura."
> DANTE, *Inf.* Cant. 6.

A SURVEY of the world in its present condition displays a strange anomaly of tyranny and freedom, of ancient prejudice and novel wisdom. Men have not yet learned to despise the panoply of political governments; and myriads are still ready to delight in the moving miseries, the useless cunning of military tactics. War, with its disastrous consequences, is still the glory of mankind; and a multitude of particular evils is merged and forgotten in the cruel splendor of a day of slaughter. Life may still be sacrificed with impunity at the caprice of a single man; and a king may hear of an army lost, and coldly confer the haughty favor of saying that his faithful subjects do their duty. But in every nation there are now arising men who profess the ways of peace, and acquire and diffuse, with active benevolence, the simple truths of science. The discovery and application of a solitary fact, conducive to human safety and human happiness, is a crown more lasting than that of diadems; and the miner who is enabled to explore, with personal security, the perilous passage of his dungeon, is enlightened and protected by the efforts of a genius cultivated in the daylight of peace. Astronomy instructs us to contemplate the particles of a universe; botany traces along the heather, glade, and brake, the varied pencil of a present Deity; and anatomy developes the organs of life, and assists us in alleviating the multifarious afflictions of a world. Nevertheless, the same nation that would readily supply a thousand men with arms for slaying, slowly concedes the utility of anatomical dissection, and superstitiously conceals the remains of those very bodies whom it delights to immolate in the wanton exultation of conquest. The soldier is exalted for his prowess,—the anatomist is favored for his knowledge; but still the noisome carnage of a field of battle is deemed more admirable than the arteries of a limb beautifully displayed by the knife of the careful dissector.

Death is more interesting than life. In the darkness of the grave we are taught to behold the brightness of futurity; and in the passive structure of the corpse, we are led to discover the active mechanism of life in all its functions. The knowledge of anatomy is the knowledge of nature, as demonstrable in the noblest work of the Creator, and as applicable to the noblest of his attributes—peace and good-will. In exploring the dead body, the anatomist is in the pursuit of truth, and is perpetually endeavoring to ascend from death to life, from the mere organism of matter to the laws which govern matter itself when alive. In pursuing these delightful speculations of intellect and reason, his labor is not vain ; he is learning to meet the casualties of life, to adjust the fractures of a limb, and to fortify the blessings of health. From the filthiness of death, he learns the excellence of life ; he unfolds the nice inter-dependence of different organs ; he traces throughout every part the slender rudiments of minute anatomy.

Such and so fair is the study of death, when we have once been admitted between the veil, and behold within the sanctuary the inmost fashion of the temple. But the temple stands in the obscurity of vulgar superstition.

The full blaze of christianity has not yet dispelled the mists that still linger over the last term of human existence. The resurrection of the dead is the source of error ; and the populace, ever more eager to preserve their latest remains against that awful moment, forget that the frailty of earth is not the perfection of heaven. The spoliation of disease and the decrepitude of age, the imbecility of infancy and the precarious virility of manhood, afford but feeble notions of a glorious and eternal vitality. Happiness could not be complete in a body perpetually liable to dissolution ; virtue could never be accomplished in a being whose passions are always opposing his reason. Eternity itself would be scarcely worthy of acceptance on the terms of mortality ; and the fleeting particles of matter, which are incessantly conforming and renewing our corporeal fabrics, at once reduce to an absurdity the notion of their eternal subsistence. Impossibilities can never be true. In reasoning upon this subject, human intellect is at fault ; and we are compelled to submit implicitly to the words of revelation, while learning the final destination of our bodies. Scripture has not left us doubtful in this "land of darkness and the shadow of death :" it has pierced beyond the grave ; it has unfolded the gates of that dread abyss ; it has suffered the light of heaven to gleam in grateful splendor on the world. We are assured, that our present bodies of flesh and blood form not a part of eternity ; that the body that is sown is not that body that shall be, and that our individual identity shall develop itself in a state of novel independence. A grain of wheat is the appropriate emblem of this subject : it is sown in coldness and moisture, its blade ascends, and its ear ripens into the color of gold under the opening aspect of the skies. We shall, indeed, possess substantiality, a visibility, and sensual perceptivity, but it shall be remote from terrestrial enjoyments, and above the conditions of matter. Nor shall the putrefaction of the corpse prevent this wonderful metamorphosis ; for when time shall have an end, the mountain and the sea, the costly mausoleum and the dingy vault, shall alike divulge their morsels of corruption in the clothing of immortality. "And I set me down in the midst of the valley which is full of bones, and they were very dry ; and there was a noise and a shaking, and the bones came together, bone to his bone : and the sinews and the flesh came upon them, and the skin covered them above, and the breath came into them, and they lived and stood up an exceeding great army." The same event shall happen unto all men : to the savage who has been devoured by his fellows, and to the monarch who has been entombed in all the pomp of regal magnificence. The rite of sepulture will not confer the right of resurrection ; nor will the artificial preservation of the corpse (and the mummy even has a limited duration) make its security greater in heaven. The rite of burial is profitable only to social decency ; for if it be indispensably necessary to salvation, what is the lot of those who have died unavoidably without it ?—of Mungo Park, who perished in the wilds of Africa—of Cook, the navigator, whose bones have whitened on a foreign shore ?

What then shall we say for the corpse ? Shall not the anatomist dissect the body which must needs of itself melt into putrescence ? can he profit the living by neglecting to learn from the dead ? does he prevent the resurrection of a world by learning the nature of its dead before the whole is dissolved ? Nay, but anatomy is good, because it is humane ; and it is as worthy of the thoughts of ministers and the eyes of princes, as all the obscurity of politics and the captivating glitter of arms. The dead rise ; and the knife of the anatomist, while unlacing the body for the good of mankind, can *not* nullify the eternal fiat of the Creator.

These observations have been made, because it is vulgarly supposed that dissection is a sacrilege on popular worship. Dissection from mere wantonness is impiety ; dissection for knowledge is wisdom. If we are wise, we shall revere our intellects, and not our bodies ; we shall use, and not abuse, our limbs and animal functions while yet they are ours in life ; and, resting in hope, we shall have no fear concerning our deaths, whether our bodies become the dust of the grave, the food of maggots, or the subject of the anatomists ; or whether, by any chance medley in human affairs, they be lost and wasted in the waters of the ocean.

Medical Gazette.

ON THE BEST METHOD OF PRACTISING PERCUSSION.

The following methods of percussing the chest are at present in use :—

1st. By striking the chest with the ends of the fingers. This is objectionable, on account of the pain inflicted by it in pleurisy and other similar affections, in which percussion is most likely to be tried. In the case of females also it cannot be expected that it would be permitted ; and although in hospitals, and in the instance of some private individuals, no obstruction may be offered, yet the method not being of universal application, it may be wanting at the crisis when the practitioner is in the utmost need of it.

2d. By percussing with the ends of the fingers of one hand on a finger of the other hand laid on the chest, in order to receive the blow. Undoubtedly by this the patient is saved from being hurt, but, in consequence of the difference of action between the right and left hand, it is hard to percuss a patient placed in a bed, without changing the angle at which the fingers strike, so much as to obscure very considerably the sound of fulness or emptiness, upon which our judgment of the case is to be formed.

3d. By percussing with the fingers on an ivory plate, as recommended by M. Piorry.

4th. By percussing with the fingers on a piece of Indian rubber. Both of these methods are objectionable, on account of the different angles at which the fingers of the operator strike, and the different sound thence produced ; but chiefly on account of the superficial sound produced by the stroke on those substances, and which is so loud as to obscure the sound of fulness or emptiness—the great desideratum to be attained.

The method of percussion adopted by Dr. Osborne, of Sir Patrick Dun's, although very simple, yet has been the result of many trials, made under the conviction that the methods now mentioned are all of them attended with uncertainty and difficulty to the young practitioner. He uses two pieces of sole leather of a circular form, and about an inch and a half in diameter, and percusses with the edge of one, perpendicularly, on the surface of the other. The accuracy with which these render the sound of fulness or emptiness is quite remarkable, and appears to be owing to the leather and integuments of the body having nearly the same density, and consequently rendering the same vibrations. The leather must be of a porous texture ; for if it has been hammered, the superficial sound takes place which is so objectionable in the ivory and Indian rubber. To strike with the edge of another circular piece is advantageous, both on account of the ease with which the stroke is made at the same angle, and also because the superficial sound is thus reduced to the least possible, inasmuch as the periphery of a circle can touch a right line only in a point. It is necessary, however, to observe, both with respect to this and any other means of *mediate* percussion, that it must never be performed till the substance to be percussed has been placed in the closest possible contact with the patient's skin. If this has not been done, then hollow sounds will be communicated from the intervening space, and the true sound of the interior will not be obtained.

Ibid.

INCONTINENCE OF URINE.

Of the Incontinence of Urine. From Mr. Charles Bell's Treatise on the Diseases of the Urethra.

Is it beneath the dignity of the subject to inquire why children pass urine in bed ? Many a little urchin might be spared his flogging if the very simple cure was known. I remember to have seen a child brought into the hospital, where a cord tied round the penis, to spare the jade who attended him the trouble of raising the child from bed, had cut through the urethra. Boys have been made miserable, during what should be the happiest period of life, from this circumstance alone. I have known a man of twenty, kept from a public education owing to the same cause. And very lately a young gentleman confessed, that when visiting neighboring families in the country, he was under the necessity of sitting up all night, lest he should disgrace himself by passing urine in bed. If all this will not prove the importance of the matter, I can add a case more professional and grave :—I have known a young man suffer a long and painful attendance on a surgeon, going through a course of medicine, with the use of bougies to remove this complaint, which he might have got rid of, as I shall show, by turning himself round. This occurrence never takes place, but when the boy is asleep upon his back; and the cure is a simple one : he is to accustom himself to sleep upon his face or side ; the urine is not passed, nor is he excited to dream of making urine while he keeps this position.

The circumstance is unaccountable, until we reflect on the position of this master spring of the muscles of the bladder—the sensible spot a little behind and below the orifice of the bladder. When a person lies upon his belly, the urine gravitates towards the fundus ; but when he lies on his back, it presses upon this sensible spot, and distends that part of the bladder which is towards the rectum. If, when the bladder is full, we press upon the lower part of the belly, we feel very distinctly that the pain excited is in this spot near the orifice of the bladder. If, in a morning when inclined to sleep, we are sensible of a similar pain, and a desire to make urine, by a change of posture, turning so as to lie on the belly, the sensation, and the necessity of rising, are removed. When a child wets the bed, it is in consequence of a dream, excited by the irritation of this sensible spot of the bladder, by the urine resting there, and stretching the bladder ; it is cruel to chastise the child ; and raising it frequently to make water does not mend the matter. But if the child be made to lie on the belly, or inclining to that position, with the cheek upon the pillow, the habit will be broken.

Boys are subject to a more serious incontinence, troubling them night and day, attended with inflammation and pain, and all the symptoms of stone in the bladder.

Stillicidium urinæ from want of action in the sphincter muscles, is generally owing to the same cause, an increased sensibility of this spot of the bladder.

ON DISEASES OF CHILDREN.

On the most important Points to which the Practitioner's Attention should be directed, while investigating the Diseases of Infancy and Childhood.

It is unquestionable that the diseases of infants and young children are by no means so well understood generally as those of adults ; and this statement cannot excite surprise when it is remembered that medical men have been intrusted with their treatment during little more than half a century, previous to which period, old nurses and widows were almost universally considered the best advisers in the various ailments of early childhood. Ridiculous, however, as must appear, in this enlightened age, the general and implicit reliance of former times upon the curative resources of the authorities just alluded to, it has unfortunately tended, by depriving practitioners of the opportunities necessary for studying infantile diseases, very materially to retard the progress of this most important branch of the healing art ; it being only since the comparatively recent transfer of parental confidence from the ignorant to the educated, that the latter have seriously directed their attention to the disorders of children, or have any valuable works appeared upon the subject; nor can these (a few excepted) bear comparison with the many sterling productions which have adorned the literature of general medicine.

Ability in distinguishing the morbid affections of infants can only be acquired, first, by the attentive study of infantile semeiology, and afterwards by clinical observation and experience; for, although there is no real mystery hanging over them, as was anciently supposed, yet it is undeniable that they are difficult to be recognized with precision, unless the observer has enjoyed considerable experience himself, or frequent opportunities of witnessing the practice of others. The ordinary modes of detecting disease are here often inadmissible: reliance can alone be placed upon that accuracy of observation which enables the experienced physician at a glance to notice and interpret certain peculiarities of countenance, gesture, &c.; from these deriving his only information as to the condition of his patient, since infants cannot indicate by words the seat or nature of their ailments. If, as Dr. Buchan well observes with respect to the recognition of disease in general, it is necessary to acquire the *tactus eruditus*, the *visus eruditus*, and the *auditus eruditus*, how indispensable must the possession of these qualities be to those who undertake the treatment of infantile diseases!

It is deeply to be regretted that there are no sufficient opportunities for acquiring clinical instruction in these maladies: great hospitals, it is well known, do not usually admit infants within their walls; and the number that are brought to general dispensaries bear but a very small proportion to the total amount of patients admitted.

Formerly, the *impossibility* of understanding the diseases of early life was gravely asserted; while of late years an opinion, equally erroneous, and almost as dangerous, has been held by some authors, who would have us believe that there is *no difficulty whatever* in recognising them; because, they say, "children speak a much more intelligible language by their actions, than adults do by their words." But, even admitting for a moment the truth of this doctrine, its supporters have, unfortunately for the success of their argument, forgotten, that however expressive any language may be, the study of that language is absolutely necessary before it can be understood. All persons whose eyesight is unimpaired can see the letters of which an alphabet is composed, or the words contained in a book, yet they cannot comprehend the import of either until it has been explained by those competent to the task; or, in other words, until they have learned *to read*. So is it with respect to the diseases of infants: their actions, gestures, cries, &c., are open to the observation of every one; yet many of these will pass unnoticed, and all will be liable to be misappreciated or misunderstood, unless the attention has been previously directed to the subject, and their nature learned either by close observation, or being explained by others. This preliminary knowledge being attained, the observer (whoever he may be) is prepared to watch for the occurrence of even the most obscurely marked symptoms; to recognise them when present, and to understand their import; or, to resume the metaphor, he will be acquainted with *the morbid language of children*. If such be the difficulties attendant upon the detection of infantile diseases, it will readily be believed that parents and others often fail to notice their commencement ; indeed, it is a fact, as unquestionable as it is lamentable, that from this cause the physician is very frequently summoned only to witness suffering beyond relief, and to detect irremediable disorganization of structure. That fatal malady, hydrencephalus, or water on the brain, as it is popularly termed, may be aptly adduced in illustration of this position, which disease being, at its commencement, of an insidious character, frequently creeps on unperceived until its most dangerous symptoms suddenly develope themselves. Medical advice is then sought, but too often proves unavailing, because the period which alone admitted of active treatment has been allowed to pass by unemployed ; and thus it is that the disease in question is regarded by many, even of the profession, as *incurable* ; whereas there can be no doubt, that at its commencement, when not dependent upon hereditary causes, it is, if properly treated, remediable in a majority of instances, and even in its most advanced stage some of the unfortunate children, who are the subjects of it, may still be restored to health by appropriate remedies perseveringly applied. But to return. Deplorable as are the circumstances to which reference has been made, it is still consolatory to know that they might be avoided, if the more prominent symptoms of disease in infants and children were more generally understood : not that it is for a moment to be supposed, that parents and others, by being familiar with them, would be qualified to take upon themselves the duties of the physician, but they would in consequence be alive to the first deviations from health in their offspring, or in those committed to their care,—would be aware when danger threatened, and thus be warned *in time* to avail themselves of the experience of their medical attendant.

The term "symptom" is employed in medical language to express some deviation from the natural state or appearance of the human body, which deviation is an indication of disease. A symptom is, therefore, an indication of disease, by which its presence is recognised in the system.

The arranging and art of detecting symptoms has been termed semeiology,* or symptomatology,† which may be divided into adult and infantile ; the latter treating solely of the symptoms occurring during infancy and childhood, the former comprehending such as are observed from the age of puberty until the latest period of life.

Disease, in infants and young children, is to be detected by an attentive consideration of their general appearance ; by their color and temperature ; by the position in which they place themselves, and by their cries and gestures ; by a minute examination of the individual parts of their bodies, and by a consideration of any peculiar conformations which may be found ; by ascertaining the existence or absence of pain ; by an examination into the state of the various functions, and of the condition of the different secretions and excretions.

Information upon all or most of these points can be procured by the personal observation of the medical attendant ; but there are other collateral circumstances often requisite to be known, in order to determine his judgment, which can only be learned from others. Inquiries must, therefore, be made as to the age of the patient, the time which may have elapsed since the accession of illness, and the symptoms which then presented themselves. Information must also be sought, from which it may be determined whether the disease be dependent upon hereditary causes, and whether it had previously occurred to the patient.

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* From two Greek words, signifying a sign and a discourse.

† From two Greek words signifying a symptom and a discourse.

London Gazette of Health.

THE USE OF THE TREPHINE IN EPILEPSY.

The following interesting case was furnished the Transylvania Journal of Medicine by Professor Dudley, being the sixth of the sort which has occurred in his hands. The other five cases were related in his paper on "Injuries of the Head," published in the first number of that Journal. The success of this practice establishes two important principles in Surgery;—1st. That the brain will bear severe mechanical irritation for a great length of time, without fatal disorganization; and 2d. That the use of the trephine under such circumstances may restore the organ to its former healthy condition. The cases of Mr. Cline, first published, we believe, in the paper just referred to, bear only a slight resemblance to those of Prof. D., and are not meant by him, or by Sir Astley Cooper, who has since noticed them, to establish these principles so valuable in practice.

Mr. —— received a gun-shot wound on the head in the month of March, 1832. On examination next day, his physician took from the wound a number of small bones, when, by reason of an injury done the dura mater, some brain escaped. So soon as the bones with the disorganized brain were removed, he was dressed, and at the expiration of two months he was thought to be well. The patient states, however, that a slight discharge continued to issue from the wound, and after some months epileptic convulsions, with a great derangement of the general health, ensued. It was then discovered, on examination, that the matter issued from the surface of the brain, and that the cranium appeared to be diseased. Under these circumstances he came to Lexington for assistance, his friend having furnished the preceding narrative.

On his arrival here his general aspect was that of an individual, who had suffered greatly from derangement of the cerebral and chylopoietic functions. A cicatrix of two and a half inches in length, on the central and posterior portion of the right parietal bone, pointed out the original injury.

On two points of the cicatrix were discovered small sinuous orifices, from whence was discharged an unhealthy pus. By the aid of a common probe diseased bone was detected.

The trephine was applied in the direction, and on one side of the original fracture. So soon as the segment of bone was removed by the trephine, isolated portions of bone were discovered beneath the dura mater, in a cavity of some dimensions occasioned by the absorption of the brain. Three of these, amounting in size to the thumb and finger nails, were removed, together with a morbid growth from the surface of the wounded dura mater. Simple dressings were then applied, and renewed occasionally for the week, when the patient was discharged, free from all embarrassment, both in the corporeal and intellectual functions.

Communicated for the Boston Medical and Surgical Journal.

SCARLATINA.

Mr. Editor,—At the present period, when the public mind appears to be so much excited upon the spread of Epidemic Diseases, perhaps a few remarks from this northern region may not be unacceptable. In this place, and I believe throughout our country, the past winter has seldom or never had a parallel for severity and duration. On the 25th of November last, I was able to pursue my usual round of professional business in my sleigh—and on the 3d of April, for the first time, I laid it by. During the more than four intermediate months the sleighing was *good* : a similar occurrence is not remembered by our oldest inhabitants.

During the early part of the winter, Pleuritis, Pneumonia and Influenza were very prevalent. Scarcely a house in town but one or more of its inmates were, during the period, forced to seek the advice of a Physician. Numerous cases terminated fatally, and *many* received a shock from which they can never recover. In the early part of February, the disease mentioned at the head of this article, first made its appearance within the circuit of my ride, and for the first time came under my observation. News from abroad had before reached this place of the prevalence of the disease, and the fatal havoc it was making with the lives of children. All were therefore dreading its approach, and anxiously watching the least symptom of its appearance, fully believing it fated to blast their fondest hopes,—the sure harbinger of death to some at least of those they held most dear in life.

A young child about 7 years of age was first attacked. She had attended school during the day, as usual, and on her return at night first entered her complaint of ill health. I was summoned in haste, and found my little patient on the bed, enveloped in warm blankets and drinking freely of a strong infusion of *red pepper* and vinegar, as hot as it could be taken. (This, it may be well to mention, *was* and *still is* a very popular remedy for this disease ; and often strongly and strangely persisted in, even by medical men themselves.) I immediately removed some of her super-incumbent burden, and ordered a suspension of Thompsonian quackery. The little sufferer complained of pain in the head—a soreness of the throat, and stiffness of the tongue. Her pulse beat about 140 in the minute, and rather feeble ; her skin was hot and dry, and she had constant inclination to vomit. I took from the arm about ℥xii. of blood ; her pulse diminished about one third in frequency, and rose proportionably in strength. I then gave about 5 grs. of Calomel and 10 of Ipecac. She puked three or four times, and sunk into a quiet sleep. I then left her, with directions to give a little infusion of Senna and Manna if no stools within two hours ;—after a free evacuation of the bowels, this to be followed by about 5 grs. of Pulv. Ipecac. Comp. Early the following morning I again visited my patient, and found her free from pain—a slight soreness of the throat remained—several livid spots upon the fauces and tonsils, and the surface of her body completely covered with a scarlet efflorescence. Continue the use of Pulv. Ip. Comp. and Pulv. Ant.: obtain a full and free evacuation from the bowels daily:—use infusion of Sago, Balm, &c. sweetened with honey, for drink and as a gargle. In about ten days I had the pleasure of seeing this patient *well.* Since that time I have had about 50 cases of the same complaint, and I have at this time 12 or 14 under my immediate care. In *every* instance I have pursued nearly the same plan of treatment, varying only in reference to the age, sex and constitution of my patients, and I have lost but *one* of the number. In the instance that proved fatal, I was not applied to until the 3d day of the disease; the child was about five years old, unusually fleshy, and had been highly stimulated with Cayenne, *warm sling*, &c. before I saw it. I have in no case seen fit to employ or recommend *stimulants*, though in many instances I have been solicited to on account of the great *apparent* debility.

Whether the success which has attended the means I have employed, has been owing to a correct opinion of the complaint, or to the mildness of the disease, I am unable to say; I only state facts to elicit remarks from more able pens.

Is Scarlatina contagious? Such is the prevalent opinion in this region among Physicians and others, but I have seen no reason for such belief. Or is it not dependent upon the state of the atmosphere, and, like Influenza, likely to subside when the air shall become warm and dry.*

Yours, E. LEFFINGWELL.

Thetford, Vt. April 27th, 1832.

Communicated for the Boston Medical and Surgical Journal.

CONTAGION—THE PROPRIETY OF A POPULAR DISTINCTION QUESTIONED.

MR. EDITOR,—Can you or any of your correspondents inform me on what ground some physicians set up a distinction between diseases contagious by persons, and those contagious by merchandise. In the multiplied discussions with which our brethren in the four quarters of the globe have furnished us of late, respecting the old *black death*, or as it is now called the *Spasmodic Cholera*, I have noticed this distinction assumed by one side, and not questioned by the other. To me this is inexplicable, though perhaps the brighter lights of modern pathology have discovered it to the intellects of younger men. Where is the instance, among diseases long known to be communicable by contagion, of one which may be taken from the body of the sick, and is yet incapable of being excited by the clothing in which the patient is wrapt? The Smallpox, the prince of contagious diseases, the mirror in which all the great and fixed laws of contagion may be seen most clearly, is not only taken at the bed-side, but communicated through time and space almost unlimited, by the articles with which the sick man was surrounded, and which imbibed not the virus from his pock, but the atmosphere of his chamber. Still further, not only the smallpox, but the measles, and all universally acknowledged diseases of this character, may be carried from family to family in the clothing of the physician in attendance. If long exposed to fresh air, the diseased atmosphere, or in other words the contagion contained in these cloths, would be either so diluted or so far supplanted by another, as to render them incapable of inducing disease in the unprotected. But let the physician remain an hour closely with a variolous or rubeolous patient, and then let his coat be boxed up tight and sent to a distant shore, and there opened, and no doubt can remain what will be the consequence. How much more certainly would the body-linen of the patients themselves convey the miasm, in this way, to a distant part of the same or another country. These cloths are, in fact, merchandise. They may be torn into rags, and so converted into actual goods for exportation.

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* The Scarlet Fever was particularly rife in Boston, during the heats of the last summer.—ED.

The more I indulge in these reflections, Mr. Editor, the more I am induced to think that a disease that may be communicated by a sick man to his medical attendant, his nurse, or friend, by means of an atmosphere generated by his person, may also be carried in clothing (*i. e.* merchandise) to an individual at a distance ; and I doubt if there is an example or can be one, in the whole history of medicine, that justifies the distinction between contagion from person to person, and contagion through merchandise. There is no disease, I believe, which is communicable in the one way, that is not also in the other.

Respectfully, Yours,

N. H. April 16*th*, 1832. SENEX.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, MAY 9, 1832.

SPOTTED FEVER AT NEW LONDON.

WE noticed last week that a malignant asthenia, commonly denominated spotted fever, or typhus syncopalis, had made its appearance in New London, Connecticut. The New London Gazette of April 25th states, that " there may have been as many as eighty or a hundred cases, in all grades of the complaint. There is no pretence that more than eight persons have died of the epidemic, and seven of these were decidedly broken down constitutions, either from great age or other causes." The veteran practitioner, Dr. North, who resides in that city, appears personally to have given a tone to the treatment, and his Treatise on Spotted Fever, and Dr. Miner's Essay on Typhus Syncopalis, are, we understand, the principal guides in the practice, which has been adopted with great success. The following extract from a letter dated New London, Connecticut, April 25, 1832, comprises the principal information which has been received.

"I have seen, either as attending or consulting physician, a large proportion of the cases. The sweating process, by means of billets of wood, heated bricks quenched in water, and bottles of hot water, has been universally adopted, in all serious cases, at the attack. Solid opium, Fowler's solution, tinct. opii., hot diluted alcohol in some form, essential oils, warm herb teas, &c., have been the internal medicines. The sweating process operates like a charm, upon all our patients. They convalesce in two or three, or in six or eight days, at the most. Not a single person has been bled, although in some cases there has been a *quasi* pleurisy, and in others a *quasi* inflammation of the bowels, like cholera; or at any rate, there was purging and pain. Not a single emetic or cathartic, (with one or two exceptions,) or any cooling medicine, has been *intentionally* given, at the attack, by any physician. Hopkins's Cordial Elixir (a compound tincture of rhubarb), has been generally used to move the bowels, when absolutely needed. In one case, however, where there was a *quasi* croup, I tried the Russian emetic, of common salt, or hot brine; it operated both ways, and did no good or hurt. The patient got well, however. I believe the annals of medicine cannot produce another instance of such harmony of sentiment, both among physicians and the people, in a time of pestilence, as now exists in New London in regard to our malignant asthenia."

The writer takes it for granted, as is the fact, that his friend is fully acquainted with the disease, and therefore does not state symptoms, only he remarks that they coincide very precisely with those described by Dr. North, in the epidemic that prevailed in the county of Litchfield, which forms the principal subject of the treatise published by that gentleman, at New York, in 1811.

The frankness with which a malignant disease is acknowledged, in the Gazette, to exist in New London, affords a happy and striking contrast to the system of concealment and mystery, which too often characterizes the conduct of the inhabitants of many cities, while a severe epidemic is prevailing; and the unanimity of the physicians, as well as the general deportment of the citizens, under this afflicting visitation, is truly laudable.

It is particularly desirable that all practical information respecting this disease, should be brought before the profession in strong relief at the present time. We gain not a new fact respecting cholera—we take not a new retrospect of its history, that does not add confirmation to the opinion already expressed, of its analogy to the spotted fever of New England: every step in our investigation, strengthens the belief that the same bold course of treatment which has controlled the latter, would exert a power scarcely less remarkable over the former. Let us then familiarize ourselves with all past experience respecting the one, that we may be the better prepared to meet and master the other. Without prejudice, and without partiality, we have attentively watched all that has transpired in other countries respecting the treatment of the cholera—the apathy of one nation, the unsettling panic of another ; the perseverance of one in modes of treatment that arrest no symptom of the disease, and the extravagance of another in wild and unpromising experiments with new remedies and modes of management, based on new and various views of its pathology ; but nothing has yet come to our knowledge that seems so rational in principle, or so promising in practice, as the treatment we recommend to the notice and the knowledge of the Faculty. The means of such knowledge are ample, and particularly rich in the accounts of spotted fever by Drs. North, Miner, and Page, that have been already referred to in this and previous numbers.

ACTION OF COLD ON THE SYSTEM.

The effect of cold, as a morbid agent, however exposed to daily observation, is still involved in considerable obscurity. It is matter of daily remark that diseases occur after the exposure of the body to this agent, which it is difficult to believe would have taken place had the exposure been prevented. The circumstances which render cold deleterious must be referred partly to the mode of its application, and partly to the state of the system. Of the latter we may hold it certain, that the body is more susceptible of cold when it has long been confined to a regulated atmosphere ; that debility from disease increases the susceptibility, though this is liable to some exceptions ; that cold is borne less well by children than by adults, in the night than in the day, when asleep than when awake. There is, also, independent of these circumstances, a remarkable difference in the susceptibility of different persons. With regard to the agent itself, the circumstances of most importance relate to the degree and the duration of the application of cold. A very intense cold, provided it does not produce freezing, will be better borne, as regards any subsequent effect, than a moderate cold of long continuance. The most severe instances of disease from the effects of cold, which we are called to observe, are those of persons exposed for many hours to a moderate cold without exercise, or with insufficient exercise. The danger is heightened by the presence of wind, and by the addition of fatigue to exposure. But independently of the difficulty of calculating the effect of this agent, arising out of the multiplicity of circumstances to be considered, we are nearly ignorant of the channel through which these effects are produced. Does cold act on the system through the lungs, or the skin, or by some channel independent of both these ? The tendency of cold to produce affections of the chest, would naturally suggest that the inspiration of an atmosphere at a very low temperature has an influence on the delicate organ employed in this function, and that pneumonia in some instances at least is directly produced in this manner.

The wonderful effect produced in our pulmonary complaints by change of climate, and by breathing constantly an atmosphere at an uniform temperature, cannot well be resolved entirely into effects produced on the skin or the general system, however salutary these effects, but must in part be owing to a more direct influence. It is not easy, in regard to the human race, to put this matter to the test of direct experiment; but we happen to have before us some results of experiments on animals, made by the distinguished physiologist mentioned in our last number, to which, though by no means conclusive in their application to our own species, we will now allude, though a detailed account of them is contained in a former volume of this Journal.

The observation was made by M. Flourens, that a young bird exposed to intense and continued cold, will almost certainly be seized with a severe affection of the chest; that he becomes motionless, breathes with difficulty, refuses food, and dies at the end of some hours of acute pneumonia. In this case, on examination of the organs, the lungs appear of a deep red color, and gorged with blood.

If, on the contrary, the cold increases but slowly and acts at intervals, the bird is seized with chronic pulmonary inflammation; and in this case the lungs, red and gorged with blood at some points, are found at others in a state of suppuration.

The comparison of these different effects, seemed to suggest a means of investigating the causes of one of the severest diseases to which humanity is subject, namely, phthisis pulmonalis. The object was to determine, 1. If in certain given circumstances, cold alone suffices to produce this malady. 2. If in the same circumstances, it is sufficient to avoid cold, in order to avoid the disease. 3. If the disease, having commenced under the influence of cold, can be cured by the sole agency of a warm atmosphere.

In this view, having taken several chickens of the same brood, he placed a certain number in a spot constantly maintained at a mild temperature: not one of this number was seized with pulmonary phthisis.

A second portion was left exposed to all the variations of temperature of the atmosphere; almost all these died of phthisis, after having gone through all the gradations incident to this disorder.

Finally, a third part having been exposed, like the last, to all the changes of the atmosphere, and having shown like them symptoms of phthisis, were transferred to a mild and uniform temperature. Most of these recovered their strength by degrees, and after a few months were entirely cured.

The next point was to compare the lungs of the fowls which had recovered, with those of the part which had been destroyed by ph thisis. In the last, the larynx, trachea and bronchiæ, were full of a purulent matter of dirty grey color and fetid odor, studded with an infinity of black specks; the tissue of the lung was gorged with blood, softened and almost putrid.

Many of its cells were found full of pus ; others presented black points, like those with which the purulent matter was marked, and at many of these points was found a small, hard, crepitating body of white color, and of horny or osseous consistence. In the chickens which had recovered, portions of the lungs presented vesicles sunk and depressed, where were still seen traces of the black points they had contained, during the continuance of the disease.

These experiments, then, go to prove, 1. That it is not only on the organization as a whole that cold acts, but that it exerts a specific action on the texture of the lungs. 2. That it acts on this tissue in two modes ; in one producing acute pneumonia, in the other a chronic inflammation, which is phthisis pulmonalis. 3. That a moderate and constant warmth prevents the invasion of phthisis, and even when this disease has already commenced, is capable of arresting its progress.

A STEEL FORK EXTRACTED FROM THE BACK.

Dr. Burns, of the British navy, has published a remarkable and almost incredible history. The patient complained of slight pain, and soreness, and tumor between the scapula and the spine, but close to the base of the former. Supposing it to be a boil, it was treated with poultices several days and opened. In the abscess a small steel rod was felt by the probe, but it could not be extracted by the forceps. The poultices were often repeated, and the steel moveable in most directions ; but, on attempting to extract it, it still offered great resistance. By means of the knife, it was at length extracted. " The foreign body," says the reporter, " having become very little loosened, and now causing more pain on being moved, I made a deep incision of about three inches in length over its course upwards, using it as a director, when it was easily extracted, and found to be a common kitchen fork, broken off close to its handle, and with one of its *two* prongs wanting about an inch of its point ; it was blackened, and in some degree rusted. It seemed to have been retained by a bridle of muscular fibres embracing its shoulders, for it was immediately liberated when this part was divided by the knife."

This patient was about 23 years of age. He had no recollection of ever having been injured in the back, and, as well as his parents and surgeons, was wholly unable to imagine how or when the fork gained admission within his cutaneous envelop.

NEW METHOD OF DETECTING OPIUM.

A chemist in England has discovered a new method of detecting opium, which promises to be of avail in legal medicine. It is the best, so far as we can judge without actual experiment, which has yet been proposed, and should an opportunity offer to put it to the test, we shall be happy to record the result. The method is this :—To the solution suspected to contain opium or meconic acid, add a few drops of a solution of the muriate of gold. If meconic acid alone exists, it will be indicated by the formation of a black, inky precipitate ; but if there be narcotine present, or morphine in combination with the meconic acid, as there is in opium, then, on adding the solution of gold, a fawn-colored precipitate will be produced, which by the subsequent addition of a few drops of caustic potass, will gradually deepen in color, until it becomes very nearly black. Twenty drops of laudanum (which contain about two thirds of a grain of opium) have been discovered, when diluted with a pint of water, by the above described method of detection.

Analysis of the Sulphur Spring at Nashville.—The water of this spring was first analyzed by the late Professor Bowen. It has since been examined by other chemists, and is found to contain the following ingredients.

Gases : 1. *Carbonic Acid.* 2. *Sulphuretted Hydrogen.*—Solid ingredients : 1. *Muriate of Soda* (abundant). 2. Muriate of Magnesia. 3. Muriate of Lime. 4. Carbonate of Lime. 5. Sulphate of Lime. 6. Sulphate of Magnesia. In composition it corresponds very closely with the famous Harrowgate springs of England, the most abundant substance in which is muriate of soda.

The use of this water has been beneficial in dyspepsia, liver complaints, and other chronic visceral diseases.—*Trans. Journ. of Med.*

Epilepsy Cured by Foxglove.—Some cases are related in the Lancet, in which epilepsy was cured by the use of digitalis in infusion.

Rival to the " Alkaline Drops " of Dr. Granville.—The Exeter News-Letter states, that it is a remarkable fact that not an individual in Europe has been attacked by cholera, who has been in the habit of subscribing and paying for a newspaper !

Subscribers to this Journal are requested to forward us accounts, from time to time, of such epidemic or other diseases as may come under their notice. We shall also be happy to insert communications from them on any other subjects interesting to the medical practitioner. Several subscribers are in the habit, when they forward the pay for the Journal, of filling the envelop with such medical intelligence, and we should be pleased if the plan were more generally adopted. Contributors are entitled to six copies of the numbers containing their communications.

Whole number of deaths in Boston for the week ending May 4, 27. Males, 10—Females, 17.

Scarlet fever, 6—disorder of the brain, 1—consumption, 4—measles, 4—inflammatory fever, 1—intemperance, 1—throat distemper, 2—lung fever, 1—inflammation on the lungs, 2—dropsy on the brain, 3—dyspepsia, 1—inflammation on the spine, 1.

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THE

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VOL. VI.] WEDNESDAY, MAY 16, 1832. [NO. 14.

THE SCURVY.

From Lectures on the Theory and Practice of Medicine, Delivered at the London University,—By DR. ELLIOTSON.

Etymology.—THE word scurvy is said to be derived from some German words, *scharfpocke*, meaning sharp or violent pock, which were corrupted to *sharbock;* or from *shorf-pocke*, meaning scab or scurf-pock. However this may be, it is from the word scharbock, latinized and corrupted, that scorbutus is derived, and a very barbarous word it is. From this we are said to have our English term *scurvy;* but I should rather think it came directly from the Danish word *scurv;* and this name scurvy is used by the vulgar in a very indefinite sense, being applied by them to any ill-looking chronic cutaneous disease, but in our profession it is restricted to a particular affection.

Symptoms.—This disease is characterized by a bloated surface, and petechiæ, vibices, and ecchymoses. By petechiæ are meant minute dark red or livid points, little larger than the point of a pin; spots still larger than these are called vibices; and when instead of spots we have patches, the word ecchymosis is employed. They all relate to the same appearance, but denote a difference in extent. With respect to color, these points, specks or patches, are of a dark red or purple hue, but may contain all the shades which we see in bruises. The surface, therefore, in this disease is bloated, and upon it are seen points, specks, and patches, of a red or purple color, and of all the shades which we see in common bruises. A very remarkable circumstance, however, also attends the disease, and that is, the hardness of many parts, but particularly of the thighs. If you examine the thigh of an individual laboring under scurvy, though it be only in the slightest degree, I believe you will find it generally, but more especially under the hams, hard; and in severe cases I have seen it as hard as a board. I have not seen many cases of the disease, but in all of them I have noticed this circumstance. The gums are particularly affected; they are spongy and bleed, and either they or the breath, or both, send forth a very offensive smell. Such is the disease of the gums that the teeth very frequently fall out, and in addition to their being spongy and bleeding, they become enlarged and livid.

This is a disease of great debility, and the spirits are always very much depressed. So great is the debility, that people very frequently faint from time to time, and the pulse is found to be weak, and the surface of the body cold. Very often, ulcers form upon the surface, and discharge a thin and fœtid bloody fluid, and at last a coagulum of blood is formed. The gums are in precisely the same predicament. The blood which is discharged and coagulates upon the ulcer is with great difficulty separated from it; it adheres to the ulcer and the flesh which is beneath, and, when you remove such a coagulum, the flesh is found to be, like the gums, soft and spongy. If you remove the coagulum, it is instantly renewed; a fresh oozing of blood takes place, a second coagulum supplies the place of the first, and at length a fungus will sprout forth—a soft, flaccid, dark-looking fungus, which sprouts as fast as you take it away, and which is called by sailors *bullock's liver;* it may attain an enormous size. If this fungus be repressed, a gangrenous tendency is frequently observed; the leg will swell, and become more spotted and painful. You of course know that when a fungus sprouts forth from the dura mater after a fracture of the skull, it is very dangerous to repress it; if the part be compressed, very frequently dangerous symptoms ensue. So it is found injurious in scurvy to repress this *bullock's liver*, because the pressure induces a gangrenous tendency. The very slightest bruise inflicted upon a patient laboring under scurvy to any degree, will generally produce an ulcer of this description.

There are, however, some very remarkable circumstances respecting this disease. Old wounds, and even fractures, have a tendency to recur under it. Wherever an ulcer has existed, wherever a solution of continuity in soft parts has taken place previously, although the parts have been well cicatrized, yet under this disease the wound often opens again. Nor is this occurrence confined to soft parts, but even bones themselves, as I just now stated, which were formerly fractured and repaired, become again disunited, showing that the callus of bones is not so strong as the original parts of the body, and that it suffers when the rest of the bones do not.

There is also another very singular circumstance connected with this disease, and that is the occurrence of nyctalopia, or night blindness. Patients laboring under scurvy frequently become blind, either altogether or in part, when night comes on.

Causes.—Now the great causes of this disease appear to be the want of fresh animal and fresh vegetable food. It is on this account that formerly the disease was very common at sea, for at one period sailors were supplied with nothing but salt provision. So badly were ships formerly provided for, and so bad was the general management, that in the year 1726, when Admiral Hozier sailed to the West Indies with seven ships, he buried his ship's company twice, and then died himself of a broken heart. Deaths to the amount of eight or ten a-day took place formerly in a moderate ship's company. The bodies were sown up in hammocks and washed about the deck for want of sufficient strength on the part of survivors to throw them overboard. I may mention that Lord Anson, in the year 1741, lost one half of his crew by scurvy in six months: 961 men sailed with him, only 335 of whom were alive at the end of the year; and at the end of the second year, 71 only were fit for the least duty—not to say duty, but for the *least* duty. Sir Gilbert Blane says that the disease appears in about six or seven weeks from the beginning of sea-victualing.

You cannot have a better description of the dreadful mismanagement formerly, in regard to the navy, than you will find in Roderic Random. Smollett, both in that and in his History of England, gives an account of the armament which, about the same time that Lord Anson's expedition took place, was sent out against Carthagena. The description is from his own observation. He says the provisions consisted of *putrid salt beef*, to which the sailors gave the name of *Irish horse*, (I suppose the contractors lived in Ireland, and it looked like horse-flesh,) *salt pork and musty bread*. The salt pork came from New England, and was neither fish nor flesh, but savored of both. The bread came from the same country, and the biscuit, like a piece of clock-work, moved by its own internal impulse, occasioned by myriads of insects that dwelt within it. The butter was served out by the gill, and was exactly like train-oil thickened with salt; and though there was water enough to allow each man half-a-gallon daily for six months, yet each had only a purser's quart a-day in the torrid zone, where a gallon would have been hardly enough to repair the waste of perspiration. You cannot wonder, therefore, that scurvy formerly prevailed to this dreadful amount.

Former prevalence in London.—However, the disease prevailed likewise on shore, and scurvy at one period was one of the most fatal diseases in London, so that even in the 17th century—as late as that—there were from 50 to 90 deaths from it annually, and in the year of the plague there were not fewer than 105 deaths. These frightful occurrences took place regularly, and not during a particular year. The same reason, however, existed for the prevalence of scurvy in London which produced it at sea; for the food of the Londoners was then salt beef and pork, with a little veal. The lower orders had very little else in the time of Henry VIII. The fact was, that pasture land only was then common, and very little was cultivated. Animals could feed, of course, only during the summer and autumn; hay being a later improvement, it was impossible to feed them longer than that period, and they were therefore killed as the winter came on, and salted, and thus a store of provisions was laid up until the next spring. Garden stuff, too, was extremely scarce in those days, so that Catherine of Arragon, one of the numerous wives of Henry VIII. was actually obliged, in the beginning of the sixteenth century, to send to the Netherlands for a gardener to raise her a salad, so ignorant were the gardeners of this country of what is now considered within the reach of everybody. Cabbages and other garden stuff were not cultivated in England before the reign of Henry VIII. Government, too, at that period, seemed to encourage the consumption of this meat; for the price of meat was fixed by law at one-twentieth of what it now is, whereas wheat was fixed at only one-tenth of its present price. Care was thus taken to have a good supply of animal food, but vegetable food was comparatively neglected. I may mention that in 1700 a cabbage cost threepence, which in 1760 cost only one halfpenny; such was the advance of art and the increase of knowledge, that so great a difference occurred in the price of a cabbage at those two periods. Other greens, too, at first, were proportionately dear; and garden stuff was only used at that time on Sundays, and as a great dainty, when people had company.

The use of salt or putrid meat appeared to be the cause of scurvy. But it was not the salt; for salt, though taken in the greatest excess, will not occasion scurvy, and scurvy will take place where no salt is used—nay, persons will have scurvy who eat no meat at all; and therefore it is not this, but the want of other food—the want of fresh animal and fresh vegetable food—which induces the disease. I have seen several, not a large number, but several cases of scurvy, in individuals who had eaten no meat at all; they had been deprived of meat of every description, and it arose in them from the want of food. You will find in the Transactions of the College of Physicians, vol. ii. two cases mentioned by Sir Francis Milman, of women that had the scurvy in the country, but who had eaten no meat whatever, having lived on tea and bread after being accustomed to better food.

Sea and land scurvy, I believe, are exactly the same; and I may state, that Mr. Musgrave, who published a work on the Gout in 1703, mentions that this disease was common in Somersetshire; so that you observe it prevailed at sea, in large towns, and in the country.

There can be no doubt that many circumstances conspire to the occurrence of this disease. Cold and the want of exercise unquestionably encourage it; for sailors are observed to suffer in cold latitudes, when they are placed under the same circumstances, with the exception of latitude, in which they escape it in warm climates: this fact strikingly illustrates the effect of cold. Then, as to the want of exercise, Captain Cook says that the people in Kamschatka, who are habituated to hard labor, never have the scurvy, while the Russian and Cossac in garrison, who live in the greatest indolence, are subject to it. Sir Gilbert Blane says that the prime seamen only were attacked with scurvy, who were exempted from pumping. He instances the case of a particular ship's crew, and says, that once the prime seamen suffered the disease, whereas those who were obliged to work hard at the pump from time to time, the ship having proved leaky, escaped. Moisture also is said to have a considerable effect—I presume, especially when united with cold. La Perouse attributes the prevention of scurvy in his crew very much to the vessel being kept dry by fumigation, and braziers of hot coals. Captain Parry ascribes the first case of scurvy, in one of his expeditions, to moisture. It was observed, when scurvy prevailed in London a few years ago, at the Penitentiary at Milbank, that those persons employed in the kitchen always escaped; perhaps, however, they got better food than the rest, or more of it, but at any rate they had a warmer place. Captain King told Dr. Macmichael, as he stated in a paper read last year at the College of Physicians, that, in a voyage round the south coast of America, no case of scurvy was apparent, the crew having had plenty of lemon juice, although there was a remarkably cold and moist state of the atmosphere. I do not believe that moisture will occasion it alone, but moisture certainly aggravates the effects of cold in this disease, as it does in all others.

The difference between ships' crews now and formerly is very striking. While the crew of Lord Anson suffered so much in a voyage round the world, that of Captain Cook, in a voyage subsequently performed, suffered nothing. The difference arose from this circumstance : Captain Cook had a good supply of portable soup, sour crout, and fresh meat, and he kept his men in regular exercise, at the same time taking care that extreme cleanliness and ventilation should be observed. In addition to this they were only out about three weeks on their longest cruise, although absent so long.

Such measures as these will generally prevent scurvy, if there be no fresh provision on board, provided there is a supply of lemon juice ; and sometimes, in spite of the neglect of all these particulars, lemon juice alone will prevent it.

Treatment.—The great remedy, however, for scurvy is fresh food, animal and vegetable ; farinaceous vegetable substances are insufficient ; and when that cannot be procured, then I believe lemon juice will be found the most efficacious medicine. The effects of lemon juice on the disease are speedy and wonderful ; so wonderful are they, that the compiler of Lord Anson's voyage says, after describing the disease, and the horrors which took place from its ravages, that the cure of such a complaint seems impossible by any remedy, or any management, that can be employed. Scurvy was formerly set down, without hesitation, as an incurable disease—not only as a disease incurable *then*, but as being so formidable in its nature that it *never* would be cured ; and yet in almost every case we can now cure it with the utmost facility. It is not only lemon juice that will cure it, but all the hesperidæi—the lime, Seville and unripe China oranges. Malt and sour crout are thought to have a similar property. The custom, I believe, is to give three tablespoonfuls every morning to each man, for the purpose of keeping the disease away. Lemon juice is preserved by mixing one-tenth of spirit with it. One ounce of lemon juice, with one ounce and a half of sugar, is the present navy allowance ; and it is said that scurvy rarely occurs now in the longest voyage. Citric acid is thought to be inferior to lemon juice. During the nine years previous to this supply, the average number of sick sent to the hospitals was one man in three and nine-tenths of the whole navy ; and in the succeeding nine years it was only one in eight and four-tenths. The juice is also said to improve the general health. I may mention, as a good illustration of the power of lemon juice, that the Suffolk left England in April 1794, and had no communication with land for twenty weeks and a day, and yet all the time she had only fifteen sick, and those slightly, and soon cured by an augmentation of the first allowance of two-thirds of an ounce ; and at her arrival not one had the scurvy. In 1800, the channel fleet, consisting of 24 ships of the line, besides smaller vessels, had no fresh provisions for 16 weeks, but plenty of lemon juice, and not a single instance of scurvy occurred ; whereas in 1780, the channel fleet could not keep sea beyond ten weeks, and was worn out with scurvy and fever ; and 2500 men were sent into port with the scurvy. We read in Purchas's Pilgrim, that Commodore Lancashire sailed from England with three other ships, for the Cape of Good Hope, on the 2d of April, and arrived at Saldanha Bay on the 1st of August, the Commodore's own ship being in perfect health, from the administration of three tablespoonfuls of lemon juice every morning to each of his men ; whereas the other ships were so sickly as to be unmanageable for want of hands, and the Commodore was obliged to send men on board, to take in their sails and hoist out their boats.

This disease, of course, occurred in ancient times. It was known in the Roman army, in Germany, and also in the impiously denominated "Holy Wars;" but it was first particularly noticed in the crew of Vasco di Gama in 1497. You will find it mentioned by Pliny, as occurring in the Roman army under the command of Germanicus. But with respect to the remedy, its discovery appears to have been left for modern times, but still not recent times, as you will find it mentioned as far back as 200 years ago. There is a curious fact connected with it, and one which is very instructive, as teaching us not to despise anything without good reason. It is said that when the London College of Physicians was applied to by Government, for a cure for scurvy, they advised vinegar, which has very little power in the affection; and that a Fellow of the College, who wrote on the disease in 1753, never adverts to lemon juice at all in his Treatise, and yet that, two hundred years ago, it was mentioned in Woodall's "Surgeon Mate, or Military and Domestic Medicine,"—a work published in 1636, "by John Woodall, Master in Surgery;" and he ends his praise of it by saying that he dare not write how good a sauce it was with meat, lest the chief in the cabin should waste it to save vinegar. It is said even to have been mentioned still earlier, in Purchas's Pilgrim, published in 1600. Dr. Lind, of Haslar Hospital, revived the knowledge of it, more than one hundred years afterwards. He stated its peculiar powers, in the third edition of his work on the Diseases of Seamen, in 1772, but even then it was not brought generally into use, and the navy actually suffered most frightfully from scurvy till 1795. Although the remedy was mentioned two hundred years ago, in one book, and again in a well-known surgical work in 1636, yet the navy suffered till 1795, when a good supply of it was ordered by government, when Earl Spencer, the father of the present Chancellor of the Exchequer, was at the head of the Admiralty, on the representations of Dr. Blair and Sir Gilbert Blane, who were commissioners of the board of sick and wounded seamen. In less than eighteen months there was not a case of scurvy in Haslar Hospital. In 1780, there had not been fewer than 1457; in 1806, there was but 1; and in 1807, but 1.

So great is the effect of this article, that you will find the following passage in Sir W. Herschel's work, published in Dr. Lardner's Cyclopædia, on the cultivation of the physical sciences. He says, "At present the scurvy is almost completely eradicated in the navy; partly, no doubt, from an increased and increasing attention to general cleanliness, comfort, and diet, but mainly from the constant use of a simple and palatable beverage—the acid of lemon, served out in daily rations. If (he adds) the gratitude of mankind be allowed on all hands to be the just meed of the philosophic physician, to whose discernment in seizing, and perseverance in forcing it on public notice, we owe the great safeguard of infantile life, it ought not to be denied to those whose skill and discrimination have thus strengthened the sinews of our most powerful arm, and obliterated one of the darkest features in one of the most glorious of all professions."

The scurvy is now prevented by great attention to cleanliness—by giving sailors as wholesome food as possible—by attention to exercise and cheerfulness, and by a regular supply of lemon juice. In spite of all this, however, sporadic cases still occur; but, in general, that is all. I have had myself several cases of this disease in London, and some of them were in persons who had never been at sea, who had eaten no salt meat, but had been deprived of food nearly altogether. Others were sailors, who came on shore laboring under the disease; for in merchantmen there is continually the greatest neglect. I had one patient, a few months ago, who had been sixteen weeks at sea without any medical man on board (that, I suppose, is unavoidable in small ships); who had had nothing but the hardest salt beef, without a particle of anything else except biscuit, during the whole voyage. He was, as might be expected, laboring under scurvy to a great extent; and he said that several of the crew had died. I am not sure that the lemon juice, which I gave these patients as a matter of course, did them any good, because they were allowed fresh meat and greens every day, with porter, every article of good diet, and this was quite sufficient, I am sure, to cure the disease. I gave them lemon juice in addition, because we have such authority for its employment. However, some persons now begin to say that the lemon juice does no good—that the benefit entirely arises from the other means that are employed, and that the neutral salts, particularly nitre, answer a better purpose. I dare not say, however, that authority so accumulated and so immense as it is, respecting the powers of lemon juice, is at all to be disputed. I certainly cannot but think, till we have further facts, that it is our duty in every case to supply lemon juice, or similar things if it cannot be obtained, in the hope of doing away with the ill effects which the want of fresh food occasions.

I may mention, also, that, in regard to local applications, it is found that lemon juice is one of the best when there is a scorbutic ulcer. I believe a slice of lemon laid upon it is one of the best applications that can be employed, as Pierre Lebat is said to mention, in his Voyage to the Antilles.

Now this is a disease which I should say is a chemical disease, if any one be so. In one sense the constitution is not at all in fault; all the fluids and all the solids appear to be changed, but you have only to give a different chemical state to the body, and the disease is cured. You need give nothing which acts by a specific operation—no drug, I mean, which acts as a medicine—but employ fresh articles of diet, and you remedy the depraved constitution of the whole mass of solids and fluids. I have, therefore, mentioned this disease before I came to any of those which are clearly seated in particular parts. I am not aware that this attacks any one part in particular; it seems to be a cachectic state of the whole frame; and if any disease be an instance of universal disease, I should certainly say it was scurvy.

There is an affection very similar to scurvy in some respects, which has been arranged and described by Willan, among cutaneous diseases, and which is called *purpura*. Some are of opinion that this is the same as scurvy; but I cannot think so, for reasons which I will state when speaking of diseases of the skin.

HEREDITARY HÆMORRHAGIC TENDENCY.

A Case of Hereditary Hæmorrhagic Tendency.—By James N. Hughes, M. D. of Simpsonville, Kentucky.

In the IV. Vol. of this Journal,* page 518, I gave an account of a case of Hereditary Hæmorrhagic Tendency, ascertained to be universal among the male members of the family in which it exists; the females being, at the same time, as universally exempt from it. Since the publication of this case I have met with one of the same character, in another and entirely different family, a succinct history of which I propose now to give, simply for the purpose of calling the attention of the profession more particularly to this singular disease, for such it should undoubtedly be considered.

On visiting the house of a respectable farmer of this neighborhood, my attention was directed to the case of a youth ten or twelve years old, which appeared to be rheumatic, and which was so pronounced. The correctness of my opinion was called in question by an old lady present, who was herself a member of the family, and intimately acquainted with the history of the case. On further inquiry I ascertained it to be one of hereditary origin, the rheumatism being only the sequel of another affection to which the boy had been subject from infancy, viz. hæmorrhage. Learning that this disease was common in every branch of the N. family, of which that of my friend Mr. P. was one, I inquired particularly concerning it, when the following facts were communicated:

1st. That spitting, vomiting and purging of blood; bloody urine; bleeding at the nose; extravasations of blood among the muscles and integuments of the body generally, especially of the extremities, producing dark discolorations and swelling, attended frequently, after a few days' continuance, with obtuse pain and stiffness, and copious and obstinate hæmorrhage from very inconsiderable incisions, on whatever part of the body they are made, have been exceedingly common among the male members of the connection.

2d. That the hæmorrhage, whenever it has manifested itself, has been invariably attended with rheumatisms to a greater or less extent.

3d. That the slightest sprains or contusions have generally been followed by rheumatism of the part.

4th. That the majority of the males, who have arrived at old age, have been much disabled by rheumatism.

5th. That on the approach of old age, the tendency to hæmorrhage has been less manifest.

6th. That a considerable number of the males have died in infancy and childhood.

7th. That deaths immediately from the loss of blood have been frequent; several resulting from the employment of the lancet, some from accidental wounds, others from various internal hæmorrhages, and two of the number simply from the application of blisters,—"*the blisters*," in the language of my informant, "*drawing blood instead of water.*"

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* The Transylvania Journal of Medicine, from which we extract this interesting history.—Ed.

8th. That, of the two diseases, hæmorrhage and rheumatism, the former has always maintained the priority.

9th. That the females, though in no instance sufferers from this predisposition, have, nevertheless, invariably transmitted it to their offspring.

And 10th. That the predisposition in question can be satisfactorily traced as far back as the fourth and fifth generation.

We present the above as facts, upon the authority of several intelligent and highly reputable members of the family to which they relate ; a personal acquaintance with whom, enables us to repose the utmost confidence in their communications.

By comparing this case with that previously published, they will be seen to exhibit a striking parallel in every important particular. In both, the tendency to hæmorrhage seems to depend mainly, if not entirely, upon a morbid condition of the capillary system ; there being in neither, with the exception noticed in the account given of the first case, any morbid manifestations on the part of the larger blood vessels. The cause of this remarkable diathesis is, to us, shrouded in darkness ; and it will perhaps appear hereafter, that post mortem examinations alone are capable of revealing its true character. When it was first presented to us, we regarded it as one of those rare anomalies in physiology, occasionally met with by physicians. But since our limited opportunities for observation have brought under our notice two distinctly marked cases, we are induced to suspect that it is not so unfrequent an occurrence as it was at first supposed to be ; and although it has not yet been thoroughly investigated, it has not entirely escaped the attention of those who have been extensively engaged in the practice of medicine. If, as suggested, the affection spoken of be not so uncommon as was supposed on first consideration, it is a question meriting much attention, whether it is susceptible of mitigation or relief ? It is true that most hereditary maladies have proved extremely difficult of management. But on the other hand, it is not less true that even here the efforts of the profession have contributed materially to mitigate the sufferings of afflicted humanity.

ERUPTIVE DISEASE FROM THE USE OF CUBEBS.

Cases of an Eruptive Disease arising from the Use of Cubebs. By JOHN NORTH, F.L.S.

THE reputation of a medical practitioner in the estimation of the public as frequently depends upon the knowledge he possesses of trifling facts that are connected with his profession, as upon his intimate acquaintance with the nature and treatment of the most formidable maladies. A circumstance recently fell under my observation which illustrates the truth of this assertion : Two footmen, in a family of distinction, were suddenly attacked with a severe eruptive disease, resembling Urticaria, but differing in some respects from that complaint. The symptoms of general disturbance ran rather high, and the family became alarmed : their usual medical attendant was consulted, and, with more sincerity than judgment, he confessed that "he could not possibly conceive what the disease was, or from what cause it had arisen." Another practitioner happened to be in attendance upon one of the members of the family, and his attention was attracted by the appearance of the men servants: he had several times seen such an eruptive disease produced by the use of cubebs, and, upon being informed that a mystery hung over the nature and cause of the complaint, he at once suggested that cubebs had been taken, and that the local and general symptoms would soon disappear. The fact was precisely as he supposed. The men had gonorrhœa; had dosed themselves freely with cubebs, and from the use of this medicine the eruptive disease had arisen. They were placed under the care of the surgeon who had shown a knowledge of the nature of their complaint, and under the use of mild aperients, with a few days' confinement to the house, they were entirely relieved. The confidence of the family in their former medical attendant was destroyed, and the second practitioner has subsequently retained their friendship.

This anecdote is mentioned as an apology for relating the following cases, which happened in my own practice. I am aware that to many surgeons the fact is known, that cubebs, and *sometimes* the balsam of copaiva, produces the same effects I am about to describe; but students and junior practitioners may long remain ignorant of such occasional effects of these medicines, as I find, upon reference to works which are generally consulted, that no mention is made of them.

Captain P—, after trying various remedies for the cure of an obstinate yet trifling gleet, took, of his own accord, large doses of cubebs three times a day. On the fourth day from the commencement of the remedy, he complained of great restlessness, flushing of the face, sickness and headache. On the fifth, he was covered with an eruption from head to foot, which was accompanied by a high degree of sympathetic fever. The peculiar appearances of the eruption I will attempt to describe in the next case, which was more severe, and attended by more strongly marked characters. Captain P— recovered in a few days, by the assistance of mild aperients, salines, and confinement to the house: he was, of course, desired to discontinue the cubebs. Upon a subsequent occasion, he again ventured to try the remedy, but he gave it up after taking one dose of it, in consequence of feeling the same general symptoms of restlessness, &c. which had preceded the former attack.

Madame T— had long labored under severe leucorrhœa, and, from motives of delicacy, had neglected to consult any medical practitioner. She was recommended, by a friend, to try the effects of powder of cubebs, in doses of a small teaspoonful twice a day. After the first two doses she felt feverish, with a tingling and heat over the whole surface of the body; she had rather severe headache, and a very disagreeable sensation of fulness in the eyes; the hands and feet felt hot and numbed. On the third day, a "flush of red" broke over the whole of the body; and on the fourth, a decided eruption appeared. The cubebs was now discontinued, six doses having been taken. On the fifth day my attendance was required: her appearance was now peculiar, and rather formidable: her features were so completely changed as to leave no trace of their natural expression; the face was excessively swollen; eyes turgid and watery; lips puffed, dry, and shining; coryza; hands much swollen, and so stiff that the fingers could not be bent; respiration hurried and difficult;

pulse small, and varying from 120 to 130 ; skin burning hot ; intense thirst ; tongue very white ; constant nausea, and occasional vomiting. She was covered with an eruption from head to foot, which in some parts could not have been distinguished from Urticaria febrilis, while in others it had more the appearance of Lichen in its papular stage, but with much more intense inflammation around the base of the papulæ than is commonly seen in that disease. A fortnight elapsed before this lady completely recovered. The remedies employed consisted of purgatives, salines, and mild anodynes at bedtime.

Two or three other cases of the same kind, but milder in degree, have fallen under my own care, and several have been mentioned to me by other practitioners.

The following case was published in the Archives Générales for Nov. 1831. A young man was admitted into La Pitié, under M. Velpeau, with gonorrhœa, which had existed for two months. After a few days, he was ordered a mixture containing cubebs, copaiva, and magnesia, in the proportions of two drachms of copaiva to four of cubebs. He took this mixture daily, and on the sixth day he was attacked with violent itching and burning over the head and neck. In the morning, his face was covered with dark-red patches, and in the course of a few hours this appearance of the skin, as well as the itching and sensation of burning, had extended over the chest and arms. The following day, the abdomen was attacked in the same manner. On the third day, the efflorescence that had at first appeared became pale, but the legs and feet now presented a similar appearance. The case might easily have been taken for measles, if the cutaneous symptoms only had been regarded, but there was none of the characteristic constitutional disturbance that·attends that disease : the general health was, in fact, undisturbed. In the course of a few days the eruption entirely disappeared ; and if any doubt had existed as to its cause, it was completely removed by the following circumstance : about three weeks after his recovery, the patient repeated a dose of the medicine, which he had accidentally kept ; the eruption appeared on the following morning, and remained for two or three days.

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BOSTON, MAY 16, 1832.

THE SIGNS OF DEATH.

It is among those merciful provisions by which our passage to that bourne whence no traveller returns is rendered less gloomy and terrific, that the approach of death rarely makes itself known to the dying man for any considerable period before its arrival. A man affected with chronic disease, as phthisis, for instance, will have occasional misgivings as to its eventual termination, and will find himself forced to admit a consciousness of wasted vigor and a failing frame. But besides that this is occasional only, and that the general train of feeling in these cases inclines more to hope than to apprehension, this general doubt as to the termination of one's disease is very different from a distinct presentiment of the approach of death ; and we are disposed to think that the latter seldom occurs until within a few hours of the event itself. Sometimes too this presentiment is deceptive, and a patient may feel quite sure that he is going to die, when in fact he is not in danger. It is, on these and many other accounts, extremely desirable for the practitioner to be fully acquainted with the symptoms of approaching death, and to be able to warn the friends, and if necessary the patient himself, in such decisive terms, that the event when it does arrive may never be unexpected. This however is not always found an easy task. Death will now and then continue to elude the sagacity of the Doctor as well as his patient ; and there are few practitioners but can recal instances of patients whom they had left without anticipating any immediate danger, but who have dropped away within a few hours. To guard practitioners as far as possible from these occurrences, which are both painful and mortifying, many authors have attempted to assign the symptoms of death, and to lay down rules by which an attentive observer may detect its approach, at a considerable interval of time. The ancients, particularly attentive to every circumstance connected with diagnosis, did not overlook this topic ; and we know of no author who can be consulted with more advantage on the subject under consideration than the venerable Celsus. In the few remarks which we shall make at this time, we shall avail ourselves of his instructions ; and if occasion offers shall refer to his authority.

Among the circumstances to be regarded in discerning the approach of death, are the state of the pulse, the countenance, respiration, muscular motion, the surface, the mind, and the senses. As respects the pulse, the criterion which it affords is highly important and useful, provided its indications be carefully noted ; but where no other circumstance has led the physician to suspect the approach of danger, this may, from that very circumstance, happen to be overlooked. The change which takes place in the pulse is however less marked than that which happens to some other of the functions. It may suddenly lose its regularity and become intermittent ; or it may simply become very rapid, feeble and fluttering ; and in either case it will require a nice tact to distinguish by this means the approach of death from a state of extreme debility unattended with immediate danger. The act of dying is accompanied by a peculiar state of the pulse, which a little practice renders it easy to recognize.

The change of the countenance is one of the most striking indications of death, and that one which is most frequently noticed by friends. When this observation has been made by others, however, it is but small merit in the practitioner to confirm it. If on the contrary he is the first to observe the change, the circumstance may do some credit to his skill and sagacity. The general effect of the changes which take place in the countenance, can be better observed than described ; but some of the particular changes which go to produce it may well be noticed. Celsus mentions among these the sharpness of the nose and the collapse of the temples, together producing what we term distortion of the countenance ; the tenseness of the skin of the forehead, the dark or pallid hue of the face. The eyes become dim and glassy, the red vessels on their surface lose their blood, and the mucus secreted by the conjunctival surface adheres to the minor angles. Sleeping with partially closed eyelids, though common to this state, with others, and therefore not diagnostic, also deserves mention, as likewise an unusual whiteness of the lids, extending to the lips and nose.

The muscular strength affords another important criterion for determining the approach of death ; and the careful observation of this comes very clearly within the province of the medical man. The failure of muscular strength is principally obvious in a want of control over the sphincter muscles, so that the feces pass away involuntarily, and in the failure of the power to support the body, which therefore slides gradually toward the extremity of the bed. This effect however is not entirely accounted for on the simple supposition of a failure of muscular power, since a corpse placed in the same manner would retain its place. It is certain, as a general fact, that when great debility is present, the flexor counteract the extensor muscles, so that the limbs are flexed upon the trunk and the head thrown forward upon the trunk ; and in some of the positions produced by this preponderance, gravity no doubt will act to carry the body in the direction mentioned. Among other evidences of the failure of muscular power, may be mentioned the spasmodic action of the muscles, producing what is commonly called subsultus tendinum. The failure of deglutition, which, however, generally occurs at a later period, is only another instance of the same general fact.

With respect to the respiration, few remarks can be made which will be equally applicable to the fatal termination of all varieties of disease. The most remarkable affection of the respiratory organs is hiccup, which is among the most familiar and obvious prognostics. The mucous crepitus within the windpipe, so familiarly known as rattles, is one of the most certain indications of death ; but in croup and similar affections, it is possible for the character of the respiration to change to this, without the difference in sound being sufficient to strike the observer without considerable attention ; and this may prove in practice a diagnosis of some importance.

The state of the cutaneous surface affords one of the best indications of the approach of death, because one least likely to be simulated by a different state of things. An icy coldness of the extremities, proceeding towards the trunk, is one of the surest signs of dissolution, and one which a diligent observer will not easily mistake. If, however, the attention is not habitually directed to the state of the surface, it may happen that even this circumstance may be disregarded and overlooked. A cold sweat, though not peculiar to the state in which death is approaching, is sometimes a symptom of this state. The paleness of the general surface, apart from that of the countenance already noticed, will sometimes also attract the attention.

Among the modes in which the mind and senses are affected by the approach of death, may be mentioned delirium, which generally, though not always, is the precursor of dissolution. This is made manifest by incoherent expressions, by picking at the bedcloths, grinding the teeth, muttering, &c. The senses of sight and hearing are frequently impaired, and sometimes wholly lost, for some time before death.

Among other signs of death, not precisely falling under the foregoing heads, may be mentioned jactitation, which forms in children one of the best diagnostics; obstinate diarrhœa with very fœtid discharges, which occur in particular descriptions of cases; the sudden drying up of an habitual discharge from any external inflamed surface, and the disappearance of pain without the removal of its cause.

We shall conclude this imperfect sketch of the signs of approaching death, in the words of the illustrious author we have so often quoted; language which though somewhat humbling to the pride of science, must be confessed to be as applicable to the present state of the medical art as to that of the period at which it was written.

I am aware that the question may be asked me—if there are certain signs of approaching death, how happens it that patients deserted by their physicians sometimes recover, and that instances have occurred of those who revived even in their way to the grave. In fact, the illustrious Democritus was so persuaded of the difficulty of determining these points, that he would neither assign the symptoms of approaching death, nor the signs of its having actually occurred. To such remarks, I will not answer, that these ambiguous marks deceive only the unskilful; that the sagacious Asclepiades meeting a funeral, discovered that the apparent corpse was still living; and that the errors referred to belong not to the art, but its professors. I will take a more modest ground; confessing that the medical art is conjectural; and that from the nature of conjecture, what proves true generally, must sometimes fail. If, then, a symptom deceives us in one case of a thousand, while it holds good in the rest, this need not destroy our confidence. This uncertainty is by no means confined to the particular diagnosis in question, but extends to every branch of the healing art. Sometimes our expectation deceives us, and a patient dies of whose safety we felt entirely secure; and sometimes the remedy administered aggravates the disease. Nor can human skill, in so great a variety of cases, hope always to decide rightly; but we must confide in that treatment which is found successful in the majority of cases; and the signs which determine our prognosis, if fallacious in themselves, should only be the more diligently and carefully studied.

FRENCH MEDICAL JOURNAL.

It were too arduous a task to enumerate all the circumstances of a local, physical, moral, and political character, which render the city of Paris the richest field in Europe, if not in the world, for medical and surgical observation. Most of the productions of this field, that reach this country, come in a mask impenetrable to the majority of the profession, and we have long thought it desirable that some means should be adopted, not only to remove this mask, but also to furnish the American faculty with a more abundant supply. The Hospitals of Paris present cases of almost every description, and many that are interesting and instructive, and calculated to enlighten the dark parts of medical science. The many societies there existing, and the spirit with which this science is cultivated, not only in them, but also by their able members, in their individual capacity, all lead to the belief that an American Edition of the Journal published under the direction of Beclard, Cloquet, Dupuytren, Laennec, Orfila, Richerand, and other worthy associates of such men, must be full of important intelligence to the practitioner. Such a translation is proposed by Dr. Lindsley, of Washington, and we trust his subscription will be such as to enable him to carry his projected plan into execution.

The *Archives Générales de Medecine* is published monthly at Paris, and each number contains 140 pages. Each will be translated, and republished at Washington, as soon as possible after it is received ; but as there are occasionally articles of a local character, not particularly interesting to the American physician, it is proposed to omit these altogether, or to give an abridgement of them, so as to compress the work into 80 or 90 pages per month, with an Appendix of Domestic Intelligence, at $5 a year.

We have given these details, because the undertaking is of novel character, and, we think, will well repay the encouragement of the profession.

TREATISE ON FUEL.

Another proposed work, to which we would ask the attention of all, is a treatise on peat, and the different species of coal and wood generally used for fuel. The subject is one in which all are personally interested, and few but are desirous of eliciting, from those who possess it, any information which may affect their comfort or economy. Among the multitude of popular lectures which have, for the last three or four winters, been given daily or weekly, in almost every city and village in New England, we have heard of none on the subject of *fuel;* yet how few subjects are capable of being illustrated with so much true practical usefulness, as this. The proposed Essay, by Dr. North, of New London, will be published as soon as his subscriptions will justify the undertaking, and the low price, 75 cents, will place it within the reach of a wide circle of readers.

The Publishers of this Journal will be happy to aid in bringing out this work, by receiving subscribers for it, and sending their names to Dr. North.—Dr. N. is the author of a work on Physiology, which we have heard of, but never seen.

THE MEASLES.

This disease has been particularly prevalent of late in this city and vicinity. There have been many severe cases, and some that have terminated fatally; but generally, the cases have been mild. We introduce the subject for the purpose of remarking, that an unusually large number of adults have been attacked; few of these indeed have escaped, who have been at all exposed to the infection, and some have passed well through the disease who had supposed themselves protected by having had it in early life. The first attack, in these instances, was probably sine catarrho.

The Bene Plant.—We have often seen this plant recommended for dysentery, diarrhœa and common cholera morbus. The Greenfield Gazette states that Dr. Stone of that town has raised it for several years, and employs it in his practice. He esteems it as one of the best remedies known in the healing art, for the diseases named. In the Southern States the blacks almost universally raise it, as they are often attacked with bowel complaints, and it was calculated that last year the lives of several hundred children in Baltimore and vicinity were saved by it. A leaf or two of it are stirred in a tumbler of water for a few minutes, till the water becomes thick, when the patient drinks it. It communicates no unpleasant taste to the water, and is not therefore so likely to be refused by the tender sufferer. The seed can be obtained at the New England Seed Store in this City.

Chronic Enlargement of the Tonsils, and Relaxation of the Uvula.—These parts frequently become enlarged from repeated attacks of inflammation, and the uvula elongated. Now before resorting to excision, the plan which I adopt in these cases with the most successful results, is the application of the nitrate of silver, in the form of solution. Take a probang, the sponge of which has been wetted with a saturated solution of the nitrate of silver, and keeping down the tongue with a spoon, or an ivory knife, touch the relaxed parts with this solution. Repeat the application every other or third morning, and after a few applications the worst cases usually mend.—*Dr. Elliotson.*

Whole number of deaths in Boston for the week ending May 11, 35. Males, 20—Females, 15.

Measles, 12—inflammation in the bowels, 1—consumption, 8—old age, 1—scarlet fever, 4—bilious fever, 1—apoplexy, 2—lung fever, 2—throat distemper, 1—inflammation on the brain, 1—accidental, 1—intemperance, 1.

ADVERTISEMENTS.

NEW MEDICAL WORK.

CARTER & HENDEE have this day received, An Account of some of the most important Diseases peculiar to Women. By Robert Gooch, M.D., Author of a Practical Compendium of Midwifery. In 1 vol. 8vo.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

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THE

BOSTON MEDICAL AND SURGICAL

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MORS EPIDEMICA.

On Mors Epidemica, or Malignant Asthenia.—Communicated by the Author for publication in the Boston Medical and Surgical Journal.

This functionally diseased state of human organization should have a place assigned it in Nosology.

It may be sufficiently precise, at present, to state that epidemic death, to which millions become victims, is occasioned by great atmospherical vicissitudes, by a vitiated atmosphere, and somewhat rarely by infection or contagion, or by all these causes combined. The symptoms of this mortal state are so rapid as to terminate life in 3, 6, 12, 24, or 48 hours, unless arrested by suitable means.

The subsequent lucid description of this unhappy condition, with trifling alterations, is from the report of Sir William Crichton, physician in ordinary to the Emperor of Russia, in regard to the progress of Epidemic Death, or Cholera Morbus in Russia, until the end of the year 1830.

" General uneasiness, violent headache and giddiness, great languor, oppression at the chest, pain in the pit of the stomach and at the sides, a very weak pulse and frequent vomitings, first of undigested food and then of a watery fluid mixed with phlegm, which may have a rice color, frequent purging, severe pains which make the patient *roll about* and *scream*, cessation or very scanty secretion of urine, excessive thirst, cramp in the legs and by degrees reaching the body, voice feeble and hoarse, the eyes dull or muddy and sunk in their orbits, the features changed, resembling somewhat those of a corpse, coldness, contraction or want of plumpness, a bluish tinge of the extremities, a coldness over the whole body, the lips and tongue become blue and cold, a clammy perspiration. The vomiting and purging, when they do occur, contribute to the exhaustion of the patient.

" The spasms gradually become greater, attacking in succession the most vital parts. The pulse gradually ceases; the respiration becomes scarcely perceptible, and the patient after having suffered a most cruel martyrdom *dies quietly*, having a few moments' ease just before his end. The duration of this unhappy malady is, generally speaking, from twenty-four to forty-eight hours."

Neither the above nor any other excellent description of a set of symptoms can be expected to embrace the history of every case, because the temperament of persons varies very much, as likewise do the remote and exciting causes of epidemics, as regards intensity. Many persons, in epidemic death, or malignant asthenia, become, from torpor, either delirious or comatose; some have dark-colored petechiæ. The vital elements also operate in a morbid manner, in very different organs, in diversified epidemics.

Another abstract view of Mors Epidemica may be given, as it appears in Spotted Fever. The exciting causes having operated, the patient, being somewhat unwell, is suddenly attacked with coldness. This sensation begins at the stomach, quickly extends to almost every part of the system, and is attended with shivering and a general sensation of a chill.* Pungent pain of the head, back, stomach and other parts, is connected with this chill. There soon follows a nameless, dreadful, death-like sensation of the stomach, occurring at intervals, which alarms the patient exceedingly, and often a vomiting of its natural, or unvitiated contents. The respiration is often short, laborious or sighing. The pulse when perceptible is always very feeble, whether fluttering, slow, or somewhat quick. The tongue is more or less bloodless and cold; and when moved, it fumbles about with difficulty; it is sometimes whitish and coated. The throat often becomes aphthous, after being very sore, and so paralytic, or torpid, as to impede deglutition and injure the taste. There is soon a very great diminution of muscular energy, occasioning trembling, feeble movements and a tendency to faintness, spasms, or even a corpse-like rigidity of the limbs. The eyes have a wild, vacant, unanimated, muddy appearance. The tears trickle down the cheeks without consciousness. The eyes sometimes appear somewhat red from a stagnation of blood in their fine vessels. Torpor, coma, or delirium in many forms, and a derangement of the urinary organs, are generally made manifest. There is often a marbled and purplish and cold skin, which sometimes occasions the blood to ooze under the cuticle, forming purplish spots of various sizes and shapes. The bowels are not often diseased, although purging or costiveness sometimes occurs. A warm or wholesome temperature of the whole body is never apparent. There is always the most excruciating general distress. Such dreadful symptoms few can withstand more than twenty-four or forty-eight hours, unless a reaction of the system is artificially produced. When this is done, sweating generally ensues and brings relief. But depletion is injurious.

The sequel to such symptoms, as regards the two epidemics alluded to, if the patient withstands such intense sufferings until a reaction of the organization can take place, is a typhoid state, or speedy convalescence. This also is the case in many other epidemics. This state may sometimes be attended with deep-seated turgescence in important viscera, or typhoid inflammation, and the patient still be in great danger, or he may be in imminent danger from mere exhaustion. Such turgescence may oftener occur in some epidemics than in others. It seldom occurs in true Spotted Fever. Morbid anatomy has taught too much error, in regard to common inflammation, as being the cause of very sudden death, in many cases. Such inflammation, unless actual mortification or sphacelus is the result, does not kill immediately. But functional disease often dissipates speedily the fine vital elements of our organization, including the sentient spirit. This state is death. These elements have been often called the vital powers.*

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* An inability in our organization to generate, or procure a sufficiency of caloric, is always fraught with imminent danger, and it may be the cause of many symptoms which follow a chill, in some fevers. This fact should teach promptness in action, in such cases.

Mors Epidemica is more to be dreaded than any other species of death, because greater terror and more unhappiness is thus occasioned, and in timid individuals a predisposition exists to this disease. It likewise occasions injurious excitements in political governments. Family governments, with proper instruction, can do more to lessen the evils of pestilence than any other. Even the energetic monarchical government cannot control the aerial causes of tempest, mors epidemica, or even contagion, very effectually, unless that of smallpox be an exception. Neither governments nor physicians have the same power over the health or actions of people, that a farmer has over that of his beasts. The latter, but not the former, can execute the best plans for the preservation of his living property.

In such a dreadful malady, as has been had in review, the medicinal treatment, on the one hand, consists in the very vigorous and timely use of both internal and external stimulation, or heating and anodyne agents ; and on the other hand, venesection and other depleting remedies should be avoided ; so also anything that should excite alarm in the patient. It is feared that these last depressing agents, have been highly injurious to thousands ! Venesection should never be resorted to unless by the highly skilful. It may be proper to say that Mors Sporadica, or Sporadic Death, as it occurs to unacclimated Caucasians or the whites in tropical climates, under the name of Yellow Fever, is not meant to be included in our remark in regard to venesection, &c. In full habits it may be proper. There may be other exceptions to the very general sweating plan, which is in review. Great pain alone, and likewise much fear, are both capable of exhausting the fine vital elements of our organization, including the sentient spirit, in a sudden manner, or in a very few hours.†

Powerful anodynes and hope are both needed in such cases. Caloric and oxygen must be supplied to the patient, if deficient. These are known to be vital elements. No great nicety is needed in the use of these last agents, when the patient is in such deplorable circumstances, because when sweating ensues relief is obtained.

The reason why the above somewhat general treatment is suitable *for an infinity of dreadful cases*, is founded on the following fact, viz. the vital vigor of our whole organization, while in health, is in suitable proportion to the quantity of well oxygenized blood, and of that which is sufficiently warm, which quickly circulates through it. A stagnation and thickening of this noble fluid, for want of caloric, oxygen and other suitable aerial elements, and likewise its own highly important vital spirit, is, therefore, to be carefully guarded against or counteracted by suitable means. The latter power is what we may possess as well as the former, and thereby save many lives. Another reason may be given, viz. the best medical experience, in every age and country, has proved, in the writer's deliberate opinion, that stimulant and supporting agents are far more successful than depletion, in counteracting mors epidemica, having no reference whatever in our remarks to the treatment which may be proper for the sequela which may ensue. It may perhaps be an axiom in medicine, that when a sudden and dangerous escape of the fine vital antiseptic elements of our organization is in operation, stimulant and supporting remedies are more or less indicated. The non-professional reader is informed, that these vital antiseptic elements are caloric, oxygen, electricity, light, and the vital molecules, or warm exciting spirit of the blood. The use of cordial and external diaphoretic remedies in that particular state of our organization which has been, in this essay, called mors epidemica, should be regarded as a discovery made, and finished, which is nearly if not quite as useful as vaccination and many other discoveries which have been made in medicine. The warm bath is not the best mode of using external heat. Such a discovery should be extensively promulgated, not because sudden epidemical death can always be prevented by it, but only sometimes, or very frequently.

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* What these vital powers were, has not been honestly taught *until lately*.

† See North's Essay on Physiology.

The horror excited, when such multitudes are thus suddenly carried off, is probably one reason why more die at the commencement of an epidemic than afterwards. This fact should teach discretion. Whenever the Eastern Cholera, the Western Spotted Fever, the Plague, the Yellow Fever, or any other highly malignant epidemy, occurs, in any place, such a state of symptoms as are fraught with imminent and sudden danger should be carefully noticed, and the proper remedies promptly and vigorously applied, at the attack, not waiting too long for the tardy arrival of a physician. Many lives, that are now lost, might without doubt have been thus saved. The after treatment, if the patient survives this dreadful attack, should be directed by a skilful physician, and be done according to the nature of the sequela which may ensue. It may be worth noticing, that the Cholera, or Mort de Chien, has not always been confined to the Eastern Continent. It was witnessed many years ago by British naval surgeons, in South America, and in the West Indies. Neither, in the opinion of the writer, is spotted fever confined solely to North America. It has existed, under a different name, even lately in England.

On the one hand, avoiding fear, pestilential spots of air, when their location may be known, and atmospheric vicissitudes, as much as possible, and also infection and contagion ; and on the other hand, making use of good solid and liquid food or that which may be antiseptic, general temperance in regard to bodily and mental exercise, and in regard to caloric, air or oxygen, and most of our passions, constitute the only preventive means which are known to avoid pestilence. More can be done, however, by these resources, than many are aware.

Housekeepers generally know that the sweating process, if not excessive, is by no means dangerous. If small mistakes are made, the physician, when he arrives, can generally remedy the evil.—Promptness, in action, in epidemic death, or in malignant asthenia, is as needful as it is in asphyxia, or when persons are dying from wounded arteries. This opinion has not, hitherto, been properly appreciated or attended to by physicians. Nor can it be expected to be by the ignorant. Every family should have some good printed account of mors epidemica, that they may know how to act when pestilence, like a thief in the night, may enter their dwellings. Particular information with regard to particular modes of conducting the sweating process, can be had, having reference to the spotted fever, in North's treatise on Spotted Fever. The professional reader will likewise consult the works of Drs. Nathan Strong, jr. Henry Fish, Benjamin Vaughan, Samuel B. Woodward, Thomas Miner, and many others. An excellent account in regard to Mort de Chien, or Cholera, was published 25 years ago in Edinburgh, by Charles Curtis, Surgeon. He used, vigorously, heating and sweating agents, to both surfaces of the body, i. e. to the stomach and skin. His success was great.* Dr. North has given an account of that heroine in medicine, Mrs. Hurlbut, by whom the sweating process was revived, after it had been almost banished from among physicians by the too great influence of the immortal Sydenham and his disciples, and by morbid anatomy.

The complaints called Cholera Morbus, Spotted Fever, and likewise Yellow Fever, have all of them very deceptive names. The vague term Mors Epidemica, and the more precise term Malignant Asthenia, are therefore used by the writer as a substitute or in a far more general sense. In illustration of this position, the reader is reminded that what in Asia is called Cholera, is not always attended with vomiting and purging. Neither is the spotted fever of America very generally attended with petechiæ or purplish spots ; although it may sometimes be so. Nor is yellow fever always attended with a yellow skin.

Some persons may think that it may not be true that such a state of the organization, as has been named Mors Epidemica or Malignant Asthenia, and now partially described, occurs at the attack, in such diversified epidemics as the Cholera of India, the Spotted Fever of America, the sweating sickness of England, the Plague, the Cynanche Maligna, Yellow Fever, malignant intermittents, and other suddenly dangerous fevers. It is admitted, that the diversity of human temperament must somewhat vary the effects which result from remote aerial causes. These causes may vary also. Still it is thought that such an abstract view, as has been taken, may benefit, in times of sickness, non-professional readers—and some professional ones. The plan that has been recommended is not a dangerous one. Sudden death, which sometimes happens from over mental exertions, concussions, &c. may be prevented by the same exciting means, and not by depletion, too often had recourse to. That great solace of life, hope, should be made to move in eddies, in every direction, in times of great terror from Cholera or other dreadful sickness. Suitable instruction in regard to health may annoy the public much less than pestilential evils ; and medical men ought to aim to be truth teachers, or shining lights, in society ; and they should so teach,

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* The knowledge of Dr. Curtis's rare work was obtained after the above was mostly written.

as not to offend, or too much annoy, the organs of self-esteem in others.
TISSOT.

PRUSSIC ACID IN HOOPING COUGH.

Observations on the Use of the Hydrocyanic or Prussic Acid in Pertussis or Hooping Cough. By EDWIN P. ATLEE, M. D. of Philadelphia.

THE memoir of Dr. Magendie, of Paris, presented to the Academy of Sciences of that city, November, 1817, on the use of prussic acid in certain diseases, afterwards translated and published in the Journal of the Royal Institution of London, gave origin to numerous experiments, in different parts of Europe, in phthisis pulmonalis, irritable coughs and nervous diseases. It was not, however, until the appearance of his second memoir,* published at Paris, 1819, containing additional researches, physiological and clinical, upon the employment of this powerful agent, that the profession in Europe and America were induced to place much reliance upon its curative influence.

About the time these researches were being made in Europe, the writer of these "observations" was a student of medicine in the University of Pennsylvania, and as additional facts were presented to the professional world through the journals here and abroad, he determined to apply the acid in cases of hooping cough when a suitable opportunity presented. Statements, however, shortly appeared, giving accounts of so many fatal results from its administration under the superintendence of judicious practitioners, that some of his elder and experienced brethren of this city deprecated its use altogether. Thus circumstanced, having just entered upon practice, although his own judgment did not forbid its use under proper regulations, he dared not make an essay.

In the year 1824, however, he had an opportunity of gratifying his wishes in the case of his own child, who, at about eleven months old, was attacked with hooping cough.

Dr. Granville, of England, has reported favorably of the effects of the acid in this disease upon his own children—and believing his report, and feeling myself authorized to administer whatever my judgment indicated to be right to my own child, I gave her the following formula, viz. R. Acid. hydrocyanic, gtt. iv.; syrup. simplic. ʒij. M. A teaspoonful morning and evening. The second day she took the same quantity three times during the day, and so continued for one week, when she was entirely well. Except a dose of calomel and rhubarb, given previous to the taking of the syrup, she took nothing else.

The decided success in this case induced me to proceed in my experiments. From that time to the present, (3d month, 26th, 1832,) I have prescribed the acid, as hereafter specified, to children, from the age of six months to that of ten, fifteen, and twenty years, and to several adults, amounting in all to more than two hundred cases; the disease being radically removed in from four to ten days, or at furthest a fortnight.

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* "Recherches Physiologiques et Cliniques sur l'Emploi de l'Acide Prussique ou Hydrocyanique," &c.

During the recent prevalence of epidemic influenza, I found that when accompanied by hooping cough, the acid was not efficacious in removing the cough, and evidently increased the catarrhal uneasiness. It was therefore not persisted in.

From the numerous cases in which I have prescribed the acid in hooping cough, and an attentive observation of its powers in this appalling disease, when unattended by any other, I confidently recommend it to the medical profession. In no instance has it proved deleterious to my patients, but rather seems to have destroyed a previous predisposition to croup and catarrh.

The following is the course pursued. During the first, or what may be termed the inflammatory stage of the disease, I resort to the general depletory agents, if called on at all. Usually, however, patients seldom apply for medical advice until the second, or spasmodic stage, or that in which the *hoop* is clearly discerned. If, on inquiry, the bowels have not been freely evacuated, a full dose of calomel and rhubarb, according to the age and condition of the patient, is prescribed. If, to use the common phrase, "the child is much stopped up with phlegm," emesis is produced by antimonial wine, which, when judiciously prepared, I prefer to any other emetic. After this, the syrup is given as follows:—

For a child six months old, one drop of the acid to one ounce of simple syrup. A teaspoonful twice a day. If no uneasiness, dizziness, or sickness is produced within forty-eight hours, the same quantity is given three times a day. From six months to a year, the same may be given four times a day.

From 1	to 2	years of age,	Hydrocyanic acid, gtt.	ij.	syrup, ℥j.
2	3	do.	do.	iij.	do.
3	6	do.	do.	iv.	do.
6	12	do.	do.	v.	do.
12	15	do.	do.	vj.	do.
15	20	do.	do.	vij.	do.
20	30	do.	do.	viij. to x.	do.

A small or large teaspoonful being the dose in each case, repeated as often as close observation of its effects will warrant. I have never yet given it more than four times a day.

Having tried the imported acid, and found it entitled to little reliance, I have for the last six years prescribed that prepared in this city by our judicious chemists, Farr and Kunzi, according to the formula of Mr. Brande. It contains 4½ per cent. of pure prussic acid of Gay Lussac, and is therefore not so strong as that recommended by M. Magendie.

Believing that the acid might be efficacious in spasmodic asthma, I requested my young friend, Dr. Isaac Parrish, late resident student of the Philadelphia Alms-house, to try it. He accordingly prepared the syrup in the proportion of four drops to the ounce, and gave a teaspoonful every two hours, with decided benefit; the patient experiencing great relief in a few hours. This case, he states, had resisted any impression from the other ordinary remedies.

It is not my intention, in the present paper, to notice the statements of several practitioners in different sections of the union, who have, within a few years, administered the acid in hooping cough, because, so far as I have examined their reports, the cases have been but few in which it was fully tried. A number of my brethren in this city and elsewhere, are, at my request, engaged in experiments with the syrup, in pertussis and other affections, from whom I shall, in due season, receive reports ; my object at present is only to call the attention of physicians generally to the subject treated of, with the hope that their experience may furnish as pleasant results as my own.

American Journal of Medical Sciences.

SOME CASES OF SPINAL IRRITATION.

To the Editor of the Boston Medical and Surgical Journal.

Sir,—During a few years' practice of the profession of medicine, I have been a pretty constant reader of your valuable Journal. It was through this medium I first learned something of the character of the disease termed *Spinal Irritation*, and to this source am I indebted for the detection and successful treatment of several cases of this disease.

I do not communicate them, with the expectation of casting any additional light, either upon the pathology or treatment of the disease ; but with the hope, that by adding well-marked additional cases to those already published, I may do something towards bringing an important disease, hitherto but little attended to, into that notice it seems so highly to deserve.

In the latter part of the year 1830, there came to reside in the sphere of my practice, an unmarried lady of about 25, of rather delicate habit, who, for several years previous, had suffered from a very ill state of health, and for whom I had occasion to prescribe. She had, at different times, been under the direction of several different physicians, and most of the time from the commencement of her illness been subjected to medical treatment, from which she had received no other advantage than a temporary palliation of aggravating symptoms ; her primary disease seemed unaffected, and was now, more rapidly than ever, wasting her strength and undermining her constitution. She appeared to have derived no definite idea in regard to the nature or seat of her disease, either from her own observation or from that of her physicians. The obstinacy and permanence of her complaints, led her friends to believe them symptomatic of pulmonary consumption.

Her most prominent symptoms were, pain in the right hypochondriac region, extending through the chest to the left shoulder, great straitness about the præcordia, cough with but little expectoration, dyspnœa, palpitation of the heart, indigestion, distress on taking food, food and medicine often vomited up, bowels costive, catamenia irregular (intervals varying in length from two to eight weeks, at one time deficient in quantity, at another profuse), pain in the head, feet œdematous, much debility, but less emaciation than would have been expected from a review of the permanence and severity of other symptoms. Pulse rather frequent, but this irregularity bore no proportion to other symptoms.

She had taken the blue pill, by the direction of a former physician ; but not knowing to what extent, and strongly suspecting the liver to be the principal organ in fault, I resolved on making another trial of the mercury. Prescribed the submuriate in alterative doses, with such other remedies as the urgency of symptoms demanded. The stomach and bowels were regulated by gentle medicines. Tonics being strongly indicated, were given pretty freely, but all to no purpose.

The failure of my plan of treatment, together with a more intimate acquaintance with the history and present symptoms of the case, led me to doubt the correctness of my opinion, and the submuriate was abandoned. Finding no obvious inconvenience from tonics, they were longer continued, but without any satisfactory effect. Blisters, applied to the side, produced a very partial relief of pain while the irritation was continued, but afforded no permanent relief after their removal. She was subject to severe paroxysms of dyspnœa, with a sensation of faintness, which was very distressing to herself and alarming to her attendants. On such occasions, I was several times sent for in haste, for her friends were apprehensive she was dying.

I could now administer restoratives or palliatives, but had no confidence in any new plan of treatment I could devise for the removal of the disease. There was functional derangement of almost every part of the system—of the organs in the thorax, and of those of digestion and generation ; but I was unable to determine which were idiopathically or most deeply implicated in the disease. It seemed that her former physicians had been no less embarrassed than myself ; for from what I could learn, the treatment had often been varied, to meet different views of the case, but all to no avail.

I have never been made more sensibly to feel the inefficacy of the healing art, or a want of confidence in my own ability, than when investigating this case. In those diseases that baffle our efforts by their obstinacy or violence, whose character and treatment are satisfactorily indicated, and have been promptly attended to, we can find some degree of reconciliation to the sufferings and threatened fate of our patient ; but a lingering disease, involved in obscurity, that mocks every effort of medical skill, is to a physician of common sensibility not only perplexing and discouraging, but painful.

The disquietude the condition of my patient occasioned me, induced me to bestow more than ordinary attention upon her case. I at length imagined I discovered a similarity between her case and a description I had some time previous observed in your Medical Journal, under the title of Spinal Irritation. Upon a close and particular comparison, I found the resemblance remarkably striking. A personal examination with this view confirmed my suspicions.

The fourth and fifth dorsal vertebræ were painfully tender upon pressure. A pretty large sized blister was applied over the tender surface. Its irritation immediately produced, upon a circumscribed surface around it, a large number of *boils*, with a pustular eruption of a smaller size thickly interspersed between them. This served to strengthen my opinion of the local trouble, and the immediate improvement of the constitutional symptoms convinced me that this was the seat and origin of the whole difficulty.

She had never before been subject to any such cutaneous eruptions. Blisters upon other parts of the body had no such effect. A discharge was kept up some time by blisters, and the symptoms continued to improve. In a few weeks the patient was apparently quite free of her complaints. Some ravages had been made upon her constitution, from the long continuance of the disease ; but these, time and the restorative powers of the system have pretty much repaired—far better than I could have expected. She resides near me ; I see her frequently ; her health, strength, and spirits are quite good, and she calls herself *well*, the first time for many years.—About a year after I first saw her, she had a partial return of the same symptoms, but they were found to proceed from the same cause and readily yielded to the same remedies.

As I made no record of the above case at the time, I have not been able to be definite in regard to dates, which indeed is not essential to my design.

I have since, in two other instances, met with the same disease, of not so long standing, but quite as well developed as the one related. They bore so strong a resemblance to cases already published by Mr. Wark and others, that I consider it unnecessary to relate them in detail. They all three occurred in females, and readily yielded to the remedies prescribed by those writers.

I am fully of the opinion, as the above author observes, (though formed from a limited experience), that were physicians to examine patients with reference to this disease, " there would be no lack of cases of Spinal Irritation." .Very respectfully, yours,

Old Town, Me., May 14th, 1832. JAMES C. BRADBURY, M.D.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, MAY 23, 1832.

HOURS OF MEALS.

THERE is no one of the innumerable superfluities with which in these degenerate days we are surrounded, that could be retrenched with less real loss than the frequency of our meals. When we compare in this respect our own habits with the extreme degree of luxury attained by the ancients, the difference does not tell remarkably in our favor. The Romans had two meals : the prandium, or breakfast ; and the cœna, or dinner, which was the principal. The Greeks had likewise their ariston and deipnon ; and it is not intimated that this number was ever exceeded. Indeed, all the references to this subject contained in the classic writers, both medical and general, present a curious contrast to modern notions on the same point, or at least to those which prevail among us. Celsus, who is extremely liberal in the regimen which he allows to those in health, and who witholds all restriction as to quantity, yet speaks of two meals as the extent, and does not hint at a greater number. A man in health, he says, should shun no kind of food which people generally make use of; should occasionally dine out and indulge freely, or even to excess; should always eat as much as he can digest, and may better take two meals a day than one. But that four meals could ever be needed, does not seem to have occurred to him. We are certainly in this respect the slaves of a pernicious habit. To a man engaged in severe and constant bodily labor, it may perhaps be necessary, and it is certainly not injurious, to take food three times daily; and so far there is nothing in established habit which can be objected against. But to those engaged in professional pursuits, technically so called, or employed in commercial business, two are quite ample. In this respect we see the natural and proper order of things completely reversed. The meals of the higher classes of society, instead of being less numerous than those of the lower, are more so. It is not unusual for breakfast, dinner, tea, and supper, to succeed each other within the space of thirteen hours; and lest the interval between the two first should be excessive, a nondescript repast is interposed to stay the stomach.

Now we do not contend that any serious mischief arises from this cause; that the powers of the stomach are seriously impaired, or that the health really suffers. Habit inures to this as to other violations of the natural order of things; and probably the quantity of food actually taken is not much greater than it would be by a different arrangement. The principal objection to this multiplication of meals beyond what necessity requires, is that they consume time, and make eating and drinking the business of life. There is no doubt that an appetite, or what passes for such, may be called up at intervals even shorter than those at which these meals are accustomed to be taken. A feeling closely allied to that of hunger follows almost immediately upon the digestion of food, and is more certain to be produced where the digestion is imperfect than where this process is duly performed. If the occurrence be noticed and obeyed as the suggestion of hunger itself, meals may be repeated at intervals of less than four hours. If it be neglected, the sensation passes off, and the body is sufficiently well nourished for four hours longer, before any material inconvenience is experienced.

After all, the actual period of the occurrence of hunger depends in a great degree on the manner in which the mind is occupied. The expectation of dinner at a particular hour, will give an appetite; while, on the other hand, if the attention is engaged, fasting may be endured for a long time, even when the body is in a state of exercise, without inconvenience. The sportsman, though he pursue the sport only as an occasional recreation and as interrupting the ordinary routine of business, will easily be tempted to continue his rambles for eight, ten, or twelve hours, and will scarce be sensible, until his interest in the pastime has flagged, that he has trespassed so much on his usual hour of dining. Whatever strongly fastens the attention, will have the same effect ; and nothing can make frequent meals really desirable except the being without any object to occupy and interest the attention.

There can be no doubt that the majority of persons not employed in severe muscular labor, might limit their daily number of meals to two—a breakfast and a dinner—so as to secure a greater amount of personal comfort, and to leave more time for attention to business, than are secured by the present arrangements. There are indeed many who, even while they conform to the present custom, acknowledge its absurdity ; and while they go through the ceremony of a morning and evening repast, make dinner their only substantial meal. Nor are we aware that such persons experience any inconvenience from this cause. In fine, this, like all mere personal arrangements, ought to be regulated according to the circumstances of each individual ; but it may be considered as a truth fully established by experience, that the number of meals which custom sanctions among us is not rendered necessary by the constitution of our bodies, and was never designed by nature. In this, even the savage may read a lesson to the civilized man, since what the former does from necessity and as a consequence of the uncertainty of his supplies, the latter may imitate in a degree according to the dictates of an enlightened philosophy.

There is one other point in regard to which we are satisfied that a mistake exists with many ; namely, the advantage to be derived from the frequent use of animal food. Many persons, leading lives comparatively sedentary—that is, unattended with severe labor—imagine it for their advantage to eat animal food twice or even three times daily, under the idea of increasing thereby the muscular strength. It is extremely doubtful, however, whether this effect follows, and whether the system is as well nourished when so large a proportion of the food taken is animal. The hollow feeling of which we have spoken, and which is mistaken for hunger, follows much sooner and more certainly where meat is taken, than where it is not ; and where the digestion is not strong, a breakfast of vegetable diet will keep off unpleasant sensations for a longer time than one of animal food. The idea of the necessity of taking animal food twice daily, may therefore very fairly be set aside ; and the question as to its use or neglect being one to be decided by the inclination which precedes and the effects which follow, we believe if attention were paid to these that many more would find it their choice to breakfast with Pythagoras, and save their appetites for an Epicurean dinner. *Sat verbum sapienti.*

THE HEALTHINESS OF DIFFERENT TRADES AND PROFESSIONS.

Medical men are frequently called on by reflecting parents, to decide on the effect of an anticipated occupation of a son or daughter, upon the bodily health. We say by *reflecting* parents, because none but the thoughtless would advise a child to any mode of procuring a subsistence on the sole ground of its pecuniary promise. The moral tendency of the proposed employment, the associates with which it will necessarily bring one in contact, and the effect of its pursuit on the constitution, will be weighed deliberately and advisedly by the wise parent ; and the part the physician has in enlightening his mind on this oft-times difficult and always responsible question, is altogether too important to be acted without due examination and serious thought. We propose, therefore, in future numbers of this Journal, to offer some practical remarks on this subject, and embody most of the facts, which are desirable to be known, that have come to light in the course of its recent investigation.

The modification in diseased states of the system, induced by the habitual employment of the patient, and its bearing on the courses to be pursued in the restoration of health, will render this inquiry doubly useful to every active practitioner.

SCARLATINA.

We are happy to find that the scarlet fever, which has prevailed the past year with great fatality in this city, begins to decline. The last two or three weeks there appear to have been but few bad cases, and most of those we have seen have been such as were usually met with in former years. Feeble, however, are the hopes that may be reasonably indulged of its continuing thus mild for many weeks. There is a character of malignity about most of the epidemics which have recently prevailed, both in the new and old world, that indicates a constitution of the atmosphere under which we can expect little immediate amelioration in the symptoms of disease.

Although new cases are mild, many instances have come to our knowledge of sudden death from effusion into important cavities, during convalescence. A remarkable instance was that of a boy three years old, who went through the scarlet fever without any unusual occurrence. A week after he was considered well, the medical attendant remarked, when on a visit to another member of the family, how well this boy appeared, and all the friends supposed him to be growing fat. After playing about the house all the forenoon, he was attacked suddenly about 1 o'clock, P. M. with difficulty of breathing, tumefaction of the abdomen and the extremities, and other symptoms of effusion of water into the thorax, abdomen, and cellular membrane. The intellect and speech were unaffected. The dyspnœa increased rapidly. The face and neck presented an aspect which indicated a very imperfect arterialization of the blood, and death closed the scene before the following morning.

This instructive case shows with how much caution we should give our prognosis in cases of this description ; and we refer the reader to the excellent work of Dr. Dewees for some very important lessons on this interesting topic.

Analysis of the Blood taken from a Patient affected with Cholera.—Dr. Reid Clanny has communicated to the editor of the *London Lancet*, the following interesting analysis of the blood drawn from a patient affected with cholera. The blood was detracted five hours after the invasion of the disease. The disease proved fatal in seventeen hours.

This blood, on applying the tongue to it, Dr. C. says, had no taste, nor any particular smell, as was equally the case with the coloring matter, the albumen, and the fibrine. It contained no gases of any description ; was as black as tar.

For comparison, Dr. C. gives the analysis of the blood of a healthy person. This last contained one cubic inch of carbonic acid in the sixteen ounces.

	Healthy blood.	Cholera patient.
Water	756	644
Albumen coagulated	121	31
Coloring matter	59	253
Free carbon	32	66
Fibrine pressed and dried	18	6
Muriates of soda and potass, carbonate of soda and animal extraction	14	0
	1000	1000

Seat of Hydrocele in Women.—The *Archives Générales*, for July last, contains a translation of an interesting memoir by Dr. Sacci, which originally appeared in the *Annali Universali* for March, 1831, on hydrocele in women, a disease of rare occurrence, but which is mentioned by writers on surgery. Dr. S. asserts that he is satisfied that the opinions hitherto entertained respecting the seat of that disease are erroneous ; and he remarks that it is not very unusual to meet in women with an appendix of the peritoneum analogous to that which accompanies the testicle in men, and that it is in this prolongation that the serosity which afterwards constitutes the hydrocele is first contained.

Rare Luxation of the Patella.—Dr. Martin has communicated to the Medical Society of Lyons an instance of luxation of the right patella, the inner edge of which bone was in contact with the anterior and middle portion of the articular surface of the femur, its external edge projecting anteriorly. It occurred in a young lady, fifteen years of age, whilst turning in her bed. Dr. M. reduced the luxation by flexing the thigh on the abdomen, and then seizing the patella with both hands, and drawing it outwards turned it back to its natural position. The patellæ in this subject were small, and the ligaments somewhat relaxed.—*Arch. Gén.*

Some surgeons have denied the possibility of such a luxation. Jean

Sue, however, communicated to the Royal Academy of Surgery, in 1752, an instance of it, and another case is recorded by Dr. Wolff, in Rust's Magazine for 1828, B. 27.—*Ibid.*

Treatment of Burns.—M. Roche has employed cold water as an application to burns, and has found it to calm promptly the excessive pain produced by these injuries. But when burns are very extensive it would be difficult to keep the patient constantly in cold water, and the prolonged application of that remedy would also be productive of considerable inconvenience. The pains, however, M. R. says, may in such cases be perfectly removed by the application, for two or three hours, of ice to the head. M. Lombard has been led to adopt this mode of treatment from the great advantages he has derived from it in neuralgiæ wherever they may be seated ; and he employs it successfully to calm all intense pains. —*Transactions Médicale.*

Excision of the Elbow Joint.—This operation has been performed by David Kerr, Esq. of Aberdeen, upon a boy sixteen years of age, who had a disease of the elbow joint of ten months' standing. The patient was in a fair way of recovery.—*Ed. Med. and Surg. Journ.*

Nocturnal Emissions of Semen.—Professor Bangs, of Copenhagen, strongly recommends for the cure of this affection the muriated tincture of iron.

Dr. Cless states that he has employed the cubebs with advantage for the relief of that discharge.—*Nova Acta Regiæ Soc. Med. Havn.*

Sulphur as a Preservative against Measles.—Dr. Tourtual, a Dutch physician, states, that at a period when measles were epidemic, all the children who were under treatment with sulphur for itch escaped the disease ; and that those who were taking sulphur for the cure of hooping cough enjoyed the same immunity. Finally, he says that many children who were given a mixture of sulphur and camphor, and to whom these medicaments were applied by frictions, were not attacked with measles, whilst those who were not subjected to that medication were affected.—*Kleinert's Repertorium, and Gaz. Médicale.*

Cephalalgia cured by the External Application of Cyanuret of Potassium. —M. Andral has employed the cyanuret of potassium with complete success in a case of most intense cephalalgia, which had resisted for ten months the most powerful remedies (bleeding and seton in the neck, blisters and sinapisms). The salt was employed in solution in the proportion of from six to eight grains to the ounce of distilled water, and compresses wet with this solution were applied for eight days to the forehead and temples.—*Gaz. Méd.*

Hysteria.—Professor Chiappa states, that enemata of iced water immediately dissipate the symptoms which characterize the hysteric paroxysm. —*Annali Universali.*

Nephritic Colic.—Dr. Dubla relates in the *Osservatoire Med.* for July, 1831, two cases of nephritic colic relieved by frictions over the regions of the kidneys and ureters, with an ointment composed of fifteen grains of extract of belladonna and half an ounce of lard. Dr. D. resorted between the frictions to the warm bath.

Connecticut Medical Society.—At a meeting of the Medical Society of Connecticut, in Convention, at New Haven, May 9th, 1832, the following were the officers elected for the present year:

President.—William Buell, M.D.
Vice President.—Thomas Miner, M.D.
Treasurer.—Joseph Palmer, M.D.
Secretary.—Charles Hooker, M.D.

The Cholera appears by the last advices from Europe to be feeding itself to repletion in Paris. In the 24 hours ending at noon, on the 7th of April, there were reported 717 *new cases*, of which 470 were in males and 247 in females. The *whole number* of cases in Paris up to the above date, was 3077, and of deaths 1199. The only person of note who is said to have suffered from the disease, is M. Casimir Perrier, the prime minister of France. He was attended by Drs. Emery and Broussais, who had twice applied leeches—of course. Their distinguished patient was not considered out of danger, though the symptoms of his disease had somewhat abated.

In London, the cholera continues to subside. On the 10th ultimo, but 39 cases were reported and 28 deaths. In other parts of the kingdom there were reported but few cases, and those not very fatal. The Faculty in England, having exhausted every other topic for discussion and dispute relative to the disease, are driven at last to the question, whether or not the true cholera has been in any part of Great Britain. The negative is supported with considerable earnestness.

We acknowledge the receipt of Gooch on the Diseases of Females, Dr. Henderson's Address, and the treatise on Medical Reasoning; each of which will be more particularly noticed next week.—The communication this day published under the signature of Tissot, is from the pen of a physician of long experience, and an author of considerable note, who chooses to withold his name from the paper, but has authorised us to give it to any one who may desire it.—The valuable essay on *Sanguinarine* and its salts, and the remarks on Scarlatina, came too late for the present number.

Whole number of deaths in Boston for the week ending May 19, 41. Males, 24—Females, 17.

Scarlet fever, 4—throat distemper, 2—consumption, 4—measles, 6—unknown, 4—paralysis, 1—infantile, 2—dropsy on the brain, 3—teething, 2—mortification, 1—dysentery, 1—inflammation in the bowels, 1—rupture of a blood vessel, 1—disease of the head, 1—dropsy, 1—scald, 1.

ADVERTISEMENTS.

NEW MEDICAL WORK.

CARTER & HENDEE have this day received, An Account of some of the most important Diseases peculiar to Women. By Robert Gooch, M.D., Author of a Practical Compendium of Midwifery. In 1 vol. 8vo.

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Dr G. C. Shatt

THE

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VOL. VI.] WEDNESDAY, MAY 30, 1832. [NO. 16.

SANGUINARINE AND ITS SALTS.

On the Medicinal Powers of Sanguinarine and its Salts. By WILLIAM TULLY, M.D., Professor of Materia Medica and Therapeutics in Yale College.

Communicated for the Boston Medical and Surgical Journal.

In the year 1828, Adrian Russell Terry, M.D., then a student in the office of Dr. Alden March and myself, in Albany, obtained, under my direction, a considerable quantity of the vegetable alkaline salifiable base *Sanguinarine*, with which he prepared several of its salts, and with all of which he made experiments (still under my immediate observation) first upon himself, and subsequently on some of his fellow students, till its operative effects upon persons in health seemed to be well determined. From that time to the present, I have been constantly in the habit of employing the *Tartrate of Sanguinarine* in my medical practice, by which I have obtained decisive proofs that it possesses, in a concentrated form, all the most valuable remedial powers of the root of the *Sanguinaria*, and its ordinary pharmaceutic preparations, with the medicinal use of which, I have now been extensively conversant for about twenty years. Most, if not all of the results thus obtained by Dr. Terry and myself, have been confirmed by the observations of several other professional gentlemen, whom we furnished with the salt in question, or who have obtained it for themselves. That the operations of *Sanguinarine*, and its *salts*, may be the better understood, and more especially to assist the comparison between these, and the ordinary preparations of the root of *Sanguinaria*, I shall here give a summary of the effects of the latter.

The continued internal use of simple root of *Sanguinaria*, especially in tincture, in as large doses as can be taken without disquieting the stomach, and repeated at regular and short intervals, removes torpor of the liver, and occasions an increased secretion from that viscus, and apparently also from all the secretories that open into the stomach and upper intestines; while, at the same time, it seems to produce a universal change of condition and action in the whole secernent and absorbent systems, by means of which, as would seem, it resolves and entirely obviates certain acute, sub-acute, and chronic atonic inflammations, not only of the thoracic and abdominal viscera, but also arthritic (i. e. gouty and rheumatic) inflammations of the muscles and joints. In connexion with, and, as I am satisfied, in consequence of its operation upon the secretories of the alimentary canal, it *occasionally* excites the appetite, promotes digestion, and produces a gradual and moderate (though, as is believed, indirect) increase of the force and fulness of the pulse. In addition to these more common effects, it sometimes promotes the excretion of mucous or muco-purulent matter, from the bronchial membrane, and sometimes it restrains these discharges, according to the different circumstances of the case. Sometimes likewise it powerfully excites the catamenial secretion, and occasionally it has been known to produce uterine hemorrhage. In still larger doses, it nauseates strongly ; but, independent of this effect, it powerfully abates irritative hardness and frequency of the pulse, and irritative heat and dryness of the skin, and usually it occasions a quickly diffused and transient, but, at the same time, a very peculiar nervous thrill, which pervades the whole system, and is often extended to the minutest extremity. When *Sanguinaria* is pushed in this way, to an improper extent, it sometimes occasions vomiting, but more frequently burning at the stomach, faintness, vertigo, impaired vision, general insensibility, coldness, extreme reduction of the force and frequency of the pulse, together with great irregularity of action, and often palpitation of the heart, great prostration of muscular strength, and sometimes, though rarely, a convulsive rigidity of the limbs. In a few instances, in which very large doses have been taken by mistake, neuralgic pains have been produced in various parts of the system, and sometimes a violent but transient gastrodynia. In other instances a tetanic rigidity of the limbs, and even of the whole body, has followed such a dose ;—and in others still, both of these effects. In large and full emetic doses, it speedily excites vomiting, but without producing much nausea, or any considerable evacuation of fluids from the stomach, or any material diminution of the general energies of the system. If pushed to an injudicious extent as an emetic, it occasions great anxiety, and the above detailed symptoms of narcosis. As a general rule, it is believed, that after the internal use of *Sanguinaria*, the stomach and intestines are mostly left in a good condition, and not in an irritable, and disordered state. Now, I have repeatedly witnessed all of the above operations, except the neuralgic pains and the convulsive affections, from the use of the *Tartrate of Sanguinarine*, and I entertain no doubt that even these may be produced by a sufficient quantity of this salt.

Under ordinary use, the *Tartrate of Sanguinarine*, in moderate and uniform doses, at regular and short intervals, commonly allays morbid irritability and irritation, and particularly irritative frequency of the pulse and irritative cough. It likewise evidently exerts an especial operation upon the secernent and absorbent systems, by which a greater or less change of condition and action is produced,—by which in health, or when there is torpor or inactivity of these parts, both secretion and absorption are increased ; or, when there is excessive or vitiated secretion, it is restrained and improved,—by which certain dysthenic or cachectic complaints are removed, certain cutaneous eruptions cured, and a resolution of certain chronic, sub-acute, or acute atonic inflammations, is produced ; the whole independent of any change in the degree of the vital energies, or the strength of the action of the circulating system, and unconnected with any evacuation to which the remedial effects can be attributed,—at least, independent of any which can at all be considered as an essential part of the general operation. In one word, it is eminently deobstruent. It also possesses emetic powers, but it appears to be of very little value for the purposes of an emetic.

In large doses at once, or large quantities in the twenty-four hours, it produces vertigo, dilatation of the pupils, the appearance of a cloud before the sight, staring and protuberance of the eyes, a peculiar haggard expression of the countenance, nausea, epigastric uneasiness, coldness of the surface, more particularly of the extremities, cold sweats, diminution of the frequency, and irregularity of the pulse. From a single large dose, these symptoms begin in the course of half an hour, and disappear entirely in the course of about three hours.

The emetic powers of the *Tartrate of Sanguinarine* are much less considerable in comparison with its deobstruent and narcotic operations, than of the ordinary preparations of the root of Sanguinaria. However, small doses of the *Tartrate of Sanguinarine* are much more emetic, in proportion to their size, than large ones. Perhaps this may be accounted for by the circumstance that large doses produce so much narcotic effect as to prevent an emetic operation, while small ones scarcely produce any narcosis at all.

After trying various doses, Dr. Terry at last took a scruple of the *Tartrate of Sanguinarine* at once, with the production of all the preceding symptoms. In this case, the dilatation of the pupils was very great, and the strongest light of the sun was utterly incapable of producing the least contraction, or of giving the least uneasiness, though vision was no otherwise impaired than by a sensation of a dark cloud immediately over the eyes. The maximum of the effects of this dose, took place in about an hour ; and while under its greatest influence, the pulse was preternaturally full and flowing, without bounding, hardness, or any mark of irritation. In about twenty hours after this dose was taken, there was a discharge from the intestines, which was noticed to contain a very unusual quantity of bright yellow bile.

I think there are some cases of disease in which Sanguinaria appears to be highly indicated, but, on trial, it produces a disagreeable effect either upon the stomach, or the head, or both, and fails of giving the desired relief. I know of no means of distinguishing these particular cases, except by trial. If the case is one of this sort, any of the ordinary preparations of the root of Sanguinaria will perhaps impair or destroy the appetite, increase the frequency of the pulse, and gradually debilitate, without relieving the disease. Under such circumstances, the article should never be persevered in. I think, however, that I have satisfactory reason to believe that the *Tartrate of Sanguinarine* will agree sufficiently well in many, if not the whole of such cases.

With pure and uncombined *Sanguinarine*, but few trials have been made. Mr. A. B. with torpid liver, evinced by cinereous discharges, and costiveness, at about eight o'clock in the evening (November, 1828) took a fluidrachm of a saturated alcoholic tincture of pure *Sanguinarine*, the alcohol being of the specific gravity of 835. In a few minutes, there was nausea, which continued about two hours, but not in a very urgent degree ; and, at the same time, there was a lancinating pain, rather severe, in the superior and posterior part of the orbits of the eyes. The patient went to bed at the customary time, and no further effects were perceived during the night. In the morning there was a profuse loose discharge from the intestines, of a bright yellow color, and evidently containing a considerable quantity of bile. From the circumstances attending this, and other analogous cases, in which *Sanguinarine* or the *Tartrate* of this alkali has been employed, there is believed to be good reason for concluding that discharges from the intestines are not a direct, primary, and regular effect of these preparations, but dependent merely upon their cholagogue operation ; since they have never been observed to operate in this manner, except where they have produced a considerable excretion of bile.

In short, the *Tartrate of Sanguinarine*, and some other of its salts, have been considerably used by several of my professional friends, as well as by myself, and, as I think, to an extent sufficient to prove abundantly that this alkali is the medicinally active principle of Sanguinaria. Since I first became acquainted with it, I have taken care not to be destitute of it, so that I have already acquired a good degree of familiarity with the modes of management which seem to be necessary to its best effects, and I am satisfied that it is much preferable for medicinal purposes, to all the common preparations of the root of Sanguinaria.

It is not my intention, at this time, to treat of its therapeutic applications. In this place it will be sufficient to state, that I have found it peculiarly valuable in Icterus, Dyspnœa-exacerbans, Pneumonitis Typhodes, and Arthritis Rheumatismus v. acutus v. sub-acutus. In several instances, I have very speedily cured severe cases of jaundice, almost exclusively with this article, and I have as often suddenly arrested an exacerbation of Dyspnœa. I have also several times known a rapid resolution of Pneumonitis Typhodes produced by one, two, or three full doses of it, and I have reason to believe that many cases of acute and sub-acute atonic Rheumatism are equally capable of being suddenly arrested by it.

Indeed, such is my conviction of the value of the salts of *Sanguinarine*, that I am satisfied they require only to be well known, by the medical profession, to be introduced into general use ; and were they to be obtained upon a large scale, I am inclined to think they might be afforded at the rate of a dollar an ounce.

New Haven, Ct., May 17, 1832.

SCARLATINA.

To the Editor of the Boston Medical and Surgical Journal.

Sir,—A communication in the 13th No. of your Journal, upon the treatment of Scarlatina, induces me to give my experience in the management of the disease, which differs in some points from that of your correspondent.

The disease made its appearance in this region sometime in May, 1831, and has continued among us to the present time. In June, July and August, it raged with the greatest severity ; but those cases that have occurred since, were most of them Scarlatina in its mildest form. Previous to the appearance of this epidemic in this vicinity, it had prevailed to a considerable extent in Brewster, New Bedford, and a number of other towns about us ; and so unsuccessful were some of the attending physicians in its treatment (which I have been informed was similar to that of your correspondent), that the impression became general here, that medicine and medical skill could not control it, and the presence of a physician in a case was considered by many as a sure harbinger of a fatal termination. Consequently, when it first visited us in May, I was not called until the king of terrors menaced the speedy dissolution of the parents' fondest ties ; they then became more willing that their offspring should die under the eye of a medical attendant, than that they should die under their own care. The first patient to which I was summoned, was a young lady of fifteen, of light complexion and delicate constitution, laboring under the severest form of *Scarlatina Anginosa.* I administered ℈j. pulv. ipecac. ; gave directions to have that succeeded by ʒss. ol. ricini, to be repeated if it did not produce effectual catharsis ; this to be followed by the internal exhibition of powders, composed of pulv. ip. comp., nit. potass. āā grs. 5, every fourth hour. Sinapisms were applied to the feet and nape of the neck, there being a severe headache with paroxysms of raving delirium and constant alienation of mind. As there was great inflammation and ulceration of the tonsils, uvula, and velum pendulum palati, I ordered the lint. ammo. cum ol. terebinth. to be applied externally to the throat, and a gargle of muriatic acid. This was the second day of attack, upon which I was first called.

Upon the third day, I found my patient still delirious, with a burning heat upon the skin, and a scarlet blush upon its whole surface ; bowels tumid, pulse 140, small and depressed, great prostration of strength and septic tendency of the fluids. Continued the sinapisms, gargle, liniment, and pulv. ip. comp. with the omission of the nitras potass. ; ordered half a grain of sulph. quin. every sixth hour, the head to be shaved, and a cold lotion of the muri. ammo. dissolved in dilute acetic acid, to be constantly applied thereunto, as well as to the whole surface of the body ; and rubefacients to the bowels, with an enema of ol. ricini in a proper vehicle, to solicit from them a discharge.

The next morning I found my patient tranquil ; she recognized her friends, had passed a more comfortable night, pulse not so frequent and better otherwise, tumefaction of the abdomen subsided, but morbid heat of the skin lessened only by cold ablutions ; there still remained however an occasional wandering of the mind. Continued the same treatment.

Upon the fifth day found my patient evidently relieved, and, contrary to the expectations of her friends, recovering in the most desirable manner.

Since the above, I have had seventy or eighty cases, the majority of which were analogous to it in most of its details. I have treated them in the same way, varying the quantity and frequency of the medicine as the age and constitution of the patient, and violence or mildness of the disorder, seemed to require, and have lost two only of the number. Of these two, one was a child about eighteen months old, to which I was not called until the sixth day from the attack; and from its having been neglected so long, it died upon the seventh day. The other was a young man about 20 years of age, who was attacked with Scarlatina Maligna, eight miles from home; and after that, was brought home to be placed under my care! On the second day, livid spots appeared upon the skin, followed by a dark purple hue of its whole surface, a diarrhœa supervened, and he died on the third day.

What effect venesection, vesication, and mercurial purgation would have had upon my patients, I do not know, as I did not try them; having been satisfied with such treatment as ensured the desired result. In milder cases than those above mentioned, I sometimes substituted a mild gargle, and where there was a high fever, with but a slight prostration of muscular energy, increased the quantity of nitre, and added to other means noticed, sudorifics of pulv. ip. or ammo. acetat. liq.; and in some cases found it necessary (particularly with young children, who swallowed all secretions that came into their mouths or throats) to vomit a second and third time. Beverages, also, of balm or linseed teas acidulated with lemon juice, were allowed; and in the advanced stages of the complaint, where there was a great loss of vital power, and symptoms of putrescency appeared, I gave wine whey, or port wine in conjunction with the sulph. quin. and directed a more generous and nutritious diet. This has been my management of Scarlatina in this place; but how far it would succeed in other places, or how long it will be attended with success here, time and experience alone must determine.

Very respectfully, yours,

North Falmouth, May 18th, 1832. L. W. Sherman.

CAUSES OF CERTAIN ERUPTIVE DISEASES.

To the Editor of the Boston Medical and Surgical Journal.

Sir,—The paper of Dr. North, in your No. 14, upon "Eruptive Disease," arising from the taking of Cubebs and Copaiba, is very interesting; but these are not the only articles that produce this effect. Many other articles of the Materia Medica, and also several kinds of food, produce the same result, either on persons of particular constitutions, or on individuals under certain circumstances. Opium, for instance, in large doses, will accomplish it in almost any constitution; and smaller doses of the same medicine, in certain persons and under peculiar circumstances, will produce it in some.

I have several times known the West India Preserved Ginger occasion a general disturbance of the animal system, accompanied with an efflorescence of the whole body, with a swollen face, attended with itching and burning, resembling the worst form of Urticaria. The fruit of Anacardium, or the Malacca Bean Tree, if eaten raw, will do the same. Pills of Aloes and Colocynth will sometimes produce this effect. I once knew a very distressing case of the kind from this medicine.

The same consequences arise from various kinds of food, as lobsters, clams, mackerel, dolphin, and certain vegetables. Nuts, and dried fruits of all kinds, cherries, especially when they first come, are very apt to produce constitutional irritation and fever, with eruptive disease. Rest, an antiphlogistic diet, with aperients and salines, will soon accomplish a cure; but an emetic will generally do it sooner.

An eruptive disease, similar to urticaria, is one of the most common effects of the drinking of cold water when the body is heated, should the sufferer survive the first shock. In fact, we may with truth say, that whatever weakens the tone of the stomach, and produces a difficulty in the digestive process, is likely to occasion constitutional disturbance, which may fortunately end in a disease of the skin. MEDICUS.

May 20th, 1832.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, MAY 30, 1832.

DISINFECTING POWER OF HEATED AIR.

SEVERAL years ago the efficiency of heated air, in destroying contagion, was brought forward by Mr. Wallace of Dublin. He recommended to the guardians of public health, as well as to the profession, an instrument he had invented for the application of this disinfecting power, and urged its adoption in hospitals, quarantine grounds, and other appropriate situations. His proposition attracted little notice at the time, but is just revived in England, and, at a time when contagion and its principles are under general discussion, bids fair to meet the favorable reception it unquestionably merits.

The first thing was to determine the fact that heated air alone has the power of disinfecting articles of clothing, &c. that are subjected to its influence. This fact was proved beyond a doubt, by experiments made with articles impregnated with the miasm of smallpox. The next point was in what manner this agent should be applied. For this purpose Mr. Wallace constructed an apartment, resembling in every particular his well-known apparatus for the administration of sulphur baths. This apparatus has the double advantage of being useful as a sulphur bath, when not in use as a disinfecting machine; and is also suitable for the exposure of clothing, &c. to different kinds of vapor, should any doubt exist of the efficacy of the hot air alone.

The next thing to be done was, to compare this mode of disinfection with others in common use. This has been done originally by the projector, and recently by others, and no one questions the superiority of the new method. It is much less expensive than washing, which is the usual mode of purifying the clothing of the sick ; it requires less delay as well as trouble ; it may be applied to hats and other articles which cannot be washed without injury, and it prevents the necessity of exposing those engaged in purifying the garments of the sick, to the same disease : thus does it extinguish one of the most frequent methods by which contagious diseases are communinated from person to person and from place to place. This last point is one that must present itself with peculiar force to all who are familiar with the history of infectious diseases. How often do we hear of such diseases first breaking out in a town, in the persons of those engaged in washing the garments of individuals recently arrived from an infected port :—a mode of introduction of which we should never hear, were the infection in such clothing previously destroyed by subjecting it to the action of that simplest of purifiers, heated air.

The subject is one, at the present time, for reflection rather than discussion, and as such we present it to the reader.

THE EFFECT OF FEAR IN RENDERING THE SYSTEM SUSCEPTIBLE OF DISEASE.

There are four classes of persons who enjoy remarkable immunity from infectious diseases ; and three certainly of these classes are composed of the very persons who would be thought most liable to suffer from such epidemics. We mean physicians, nurses, children, and that class of excellent, kind-hearted females who delight, and to their honor be it told, in going about among the sick, watching with them, and performing for them numerous friendly offices that alleviate their pains and spare them many an hour of gloomy solitude.

The physician is constantly passing from the open air to the sick chamber, and from the latter again into the former ; he is fatigued by his labors, and, naturally perhaps of a slender constitution ; yet he escapes ; whilst the friend or relative, strong, robust, and living at ease in a healthy situation, makes but a single short visit to the patient, and imbibes his disease. The nurse, under circumstances in one respect the reverse of those above related, lives on, day after day and night after night, in the atmosphere of disease, and yet enjoys a similar immunity. The benevolent watcher, familiar with scenes of distress, and interested in relieving it, seldom suffers in consequence of her anxious toil ; and the infant hangs on the breast of its mother whilst she is suffering from the plague, without catching her malady. The causes of this immunity are unquestionably various. The system, in some of the cases above stated, becomes gradually accustomed to a diseased atmosphere and less susceptible of its peculiar stimulus. But when we view the whole ground, and reflect on the peculiarities of all the classes that are usually slow to receive infection, and contrast them with those of the persons most frequently and easily affected by it, we are drawn irresistibly to the conclusion that *fear, apprehension,* more than any other single agent, brings the system into a condition suitable to the reception of morbid influence ; and that the absence of fear, more than natural strength of constitution or vigor of health, renders it insensible to such influence. Infants, from the limited extent of their reasoning powers and their observation, are protected entirely from any of the peculiar effects of the fear of disease ; and the other persons mentioned, by their familiarity with sickness and its usual paraphernalia, and by the active part they are called to take in the care of the diseased, seldom if ever think of any personal hazard. The occasional visiter, on the other hand, unaccustomed to the solemnity, the scenes, and the circumstances of a sick chamber, is awed, embarrassed, agitated perhaps by the impressive manner, look, movement, and conversation of all present ; he sympathises deeply with his friend, imagines himself in the same condition, fears he has already imbibed the seeds of his disease, and takes his departure only to have those fears realized.

Every physician knows that in times of epidemics, those persons who ask with most earnestness and anxiety what means of *prevention* they can adopt, are uniformly the first to require the means of *cure.* We would impress these facts strongly on the minds of all. In sickly seasons live temperately and trouble not yourselves about your personal danger : if your friend is attacked and you can serve or console him, think not of your exposure, but visit and minister to him ; and if you do this with disinterested zeal, with a ready hand and a willing heart, with a clear conscience and undaunted spirit, you will find your reward in an almost certain immunity. We know no other protection—we can give no better counsel.

HEMORRHOIDS.

The frequency of this disease, and the suffering it occasions, renders its treatment a subject of peculiar interest to the practitioner. For ourselves, we have seldom failed to remove piles by the internal administration of tincture of digitalis, and the external use of stramonium ointment. When all other means of relief fail in any case, and an operation becomes necessary, it is a question of some importance what that operation shall be. In this country, and we believe in most others, the knife only is resorted to in such cases. Recently, Mr. Brodie, an English surgeon whose name and high repute are familiar to the reader, has been induced to abandon the operation of excision, from the profuse and occasional dangerous hemorrhage which it oft-times produces. He has removed the disease by *tying*, in more than three hundred cases ; and all have done well but one, which was a very bad subject, and one on whom he was compelled to perform the operation against his own inclination. Some danger attends, in the opinion of Mr. B., the tying of internal piles, but those that are external may always be thus removed with safety and ease.

THE CHOLERA.

Since our notice of the cholera, accounts have reached us of its existence in Ireland, and of its shocking ravages in France. In Paris and its environs the disease has spread with a rapidity that has not marked its progress in other countries. It is stated in the Paris Journals that M. Magendie has the care of a large number of the cases, and has been unusually successful. His peculiar mode of treatment consists chiefly in the free administration of punch and hot wine.

The deaths are so numerous every day that hearses have become altogether inadequate to the purposes for which they are ordinarily used, and the dead are carried to their burial places in large waggons containing six biers each. The carriage of one of the marshals, being very large and capable of containing eleven coffins, is also brought into use for the removal of the dead. On the last days of March the number of *deaths* by the disease was 98. In April, the deaths on each day, from the 1st to the 16th, were as follows :—79, 168, 212, 242, 351, 416, 582, 769, 861, 848, 769, 728, 816, 692, 567, 512. Total, 8710.

The extremely rapid strides, however, and the alarming fatality of the disease, in Paris, are not altogether unexpected by those acquainted with the local peculiarities of the city, and the habits of living of a large portion of its crowded inhabitants. The circumstance that arrests the attention is, the inroads it has made in the fashionable quarters and the higher classes. The Prime Minister of France has been attacked, but is recovered. Among the distinguished persons who have fallen victims to the disease, are mentioned—The Baron of Montville, Peer of France; M. Musset-Pathay, Major General of Division ; the lady of Colonel Chateau ; Count de Coetlosquet, Peer of France ; Dr. Leroux, dean of the Faculty of Medicine ; Dr. Petit, Surgeon of the Hospital of Gros-Caillon, and many other physicians of Paris and its departments ; Prince Casteleicala (Neapolitan Ambassador) ; MM. Morel and De la Pommeraie (Deputies) ; a son of N. de Schonen, a Commissary of Police ; a Greek Officer in the French service (Mavrocordato) ; Count Morand ; the Marchioness d'Etampes, and the Baroness de Litre. There were not a sufficient number of Deputies present on the 10th to constitute a House. The President of the Chamber of Peers announced on that day the death of Viscount de Cassine, one of the new Peers.

We are frequently asked why it is the cholera should have attacked such persons in Paris, when in every other place it has been almost confined to the lower classes. The question is difficult of solution. We put it to the profession.

The most eminent physicians in France are divided on the question of the contagiousness or non-contagiousness of the disease. The Journals that are in favor of the former doctrine, present the opinions of those who coincide in their views ; whilst those engaged in supporting the former, publish, in a manner equally conspicuous, the opinions of those medical men who are enlisted as non-contagionists. On this subject we could not have expected a unanimity of opinion in France, although the newspapers on each side would have the public believe such unanimity to exist. A similar diversity of opinion has existed at the entrance of the disease into every other country it has visited; but after a more intimate observation of it, most of the intelligent and distinguished members of the profession have voluntarily subscribed to the opinion of Drs. Barry and Russell:—the more closely they notice and become acquainted with the disease, the more reason do they see to believe it, in a measure at least, contagious. The disease, in its progress, seems uniformly to prostrate one after another of the arguments of the non-contagionists. For example, on the 4th of April, the news from Paris is—"On the question of contagion, the uniform belief is that it cannot be communicated by contact, for none of the physicians or nurses have been attacked." On the 10th of April, we hear of the death of the physicians before mentioned, besides several others who have been attacked by the disease while returning in their carriages from their visits to cholera patients. Of the nurses and sisters of charity, we know not how many have fallen victims to the malady in every town where it has prevailed.

The cholera in London had very much abated. The number of new cases reported on the 20th, was 7; of deaths, 3—recoveries, 17. On the 19th, new cases 10, deaths 5. Whole number of cases in London, 2477; of deaths, 1301. In Cork there had been, to the 19th, 85 cases and 38 deaths; and in Dublin, to the 20th, 95 cases and 56 deaths. Of these cases 42, and 27 deaths, were reported on the last two days. In Glasgow and suburbs, 869 cases and 445 deaths: new cases on the 20th, 16; deaths 7. A number of cases had appeared at Goole, in the neighborhood of Hull; also at Selby, near Leeds, and at Darlington.

The Cholera Gazette.—There is published in London a monthly periodical, called "The Cholera Gazette," containing official papers, &c. on the subject of this disease. The title would answer equally well for almost any of the medical Journals published in that metropolis during the last six months.

Massachusetts Medical Society.—The Annual Meeting of this Society will be holden at the Society's Rooms, in the Boston Athenæum, on Wednesday, the 6th day of next month. We trust that the second vol. of the Library of Practical Medicine, embracing Mr. Pearson's Principles of Surgery, and Abernethy on the constitutional Origin and Treatment of Local Diseases, and on Aneurisms, will be ready for delivery on the day of meeting.

Spotted Fever in New London.—We learn from the Middlesex Gazette that the spotted fever or sinking typhus at New London (Ct.) has subsided, and that that city is now nearly restored to its usual health. A recent letter states that there had been 260 cases of the disease, of which 12 only were fatal. The diaphoretic and stimulating practice has been universally resorted to, by all the physicians, and has been crowned with very great success.

☞ Dr. T. will confer a favor on the profession by describing the process by which he obtains the Sanguinarine and its salts.—The *experiments* alluded to in his private letter must be interesting, and we shall be happy to present them to the public through the medium of our pages,—as also the other papers referred to.

Monthly Notice of New Publications.

An Account of some of the most Important Diseases peculiar to Women. By Robert Gooch, M.D. From the second London edition. Philadelphia: E. L. Carey and A. Hart, Chesnut St. 1832. 8vo. pp. 326.

As most of Dr. Gooch's peculiar views on the diseases of the puerperal state are familiar to the medical public, and have been made the subject of discussion in the journals, we shall spare our readers any very extended consideration of them at the present. They will perhaps thank us, however, should any of them be tempted to take up the work, for directing their attention to the 2d chapter, page 105, on the disorders of the mind in lying-in women, in which the author is at some pains to distinguish from phrenitis, a state liable to be confounded with it, but requiring a distinct and very different mode of treatment. In this chapter are related several cases of mania, differing somewhat in their symptoms, and in the treatment employed, but affording, on the whole, ample ground for the conclusion that the lancet should be employed in puerperal mania with considerable caution. In all, the symptoms appear to have occurred within a few days of the delivery. In several of these cases the symptoms resembled those of delirium tremens. Dr. Gooch is less inclined to attribute puerperal mania to simple exhaustion, than to the irritation of the system caused by the unusual excitement of the sexual organs. In this respect he is disposed to class it with the nervous affections incident to menstruation and pregnancy. The repulsion of the milk at its first appearance or by premature weaning, which has been regarded as a cause of mania, is not viewed by Dr. Gooch in that light; and he states the former to be done in London to an extent and with a degree of impunity, which, except on so respectable authority, we could scarce credit.

"Among the fashionable women of this town," he says, "nothing is so common as not to nurse their children; the milk comes in about one or two days after delivery, and the breasts become as hard as stones, but not a drop is extracted; and sometimes by cold spirit lotions constantly applied to the breasts, sometimes by embrocations of oil and brandy, sometimes by poultices, (according to the whim of the nurse, the patient or the medical attendant,) with gentle aperients, the milk is suppressed in a few days. I must have known this done in more than a hundred instances during the first week after delivery, a time much more liable to disordered mind than a later period, and in not one did it occasion puerperal insanity."

We rejoice to add that this unnatural, and, however much may be said to the contrary, unhealthy custom, has not yet gained any extended countenance in this country. The consequence is that our midwifery practice is more simple, and less varied and extensive—our mothers more fondly attached to their offspring, and our children less subject to disease in infancy and childhood.

Mode of Reasoning on Medical, as compared with other Subjects. By H. Bronson, M.D. First published in the Christian Quarterly Spectator for March, 1832.

The author's object in this treatise, though not precisely what might be inferred from the title, is highly important and praiseworthy. It is, by showing the difficulties which encompass the path of medical science, and the obstacles which oppose even the more zealous and earnest in their attempts to arrive at definite principles, to render evident the absurdity of trusting to those, who without the most imperfect general education, and scarcely imbued with the principles of medicine, undertake the cure of disease. We apprehend, however, that the correctness of the conclusion will be admitted by all, independently of the ingenious chain of argument by which it is here maintained.

It is admitted, that in order to practise the art of medicine, an acquaintance with the science is absolutely necessary. Now this science includes, as its branches, anatomy, surgery, physiology, materia medica, and others ; and it may easily be shown that the labor of many years is required before the student can acquire what is to be known upon either of these branches. The conclusion is therefore irresistible, and may be made evident to the meanest capacity, that no man is fit to practise medicine without having studied the science, unless he can adduce evidence of having received that knowledge by inspiration which other men are doomed to acquire by intense labor. Now the question is, what bearing the uncertainty of medicine, or the difficulty of applying all this knowledge when once gained, to the cure of disease, has upon the force of the argument.

The state of things seems to be, that the man who has faithfully stored his mind with the best learning in his profession, who has with equal fidelity watched the aspect of disease by the bedside, and thus made himself acquainted with its physical phenomena ; who has with persevering fidelity heard lectures, and read books, and walked hospitals, and attended private practice, and dissected, and tried experiments, and made post-mortem examinations without number, and all this with the aid of good judgment and sagacity, may, after all, when he comes to apply his knowledge, be deceived, and mistake in diagnosis, or in prognosis, or in treatment, or in all three ; while on the other hand the pretender who has observed little and read less, whose whole knowledge of anatomy would not enable him to distinguish an artery from a vein, if both were lying before him, who knows not the effects of ten articles in the whole materia medica, who has never watched the progress and termination of a single case of disease in his whole life, who would be confounded if asked to describe the circulation of the blood, and who never troubles himself to consider, far less attempts to judge what internal change corresponds to a certain external aspect of disease ; it will happen, we say, that such a man as this will sometimes give the right name to a disease, will sometimes predict accurately its termination, will sometimes apply a successful remedy. Such we apprehend to be the melancholy fact.

Now what the public are interested to know, is, what is the comparative hazard of employing the learned and the ignorant practitioner. Of the danger of employing the quack, most persons we apprehend are sufficiently sensible ; no man judges him to be infallible ; the patient employs him as he takes his physic, on the ground of the chance there is that he may obtain relief, and knowing the opposite probability that he will be made worse instead of better. He or it has cured others, he or it may cure me, is an argument which applies equally well to Dr. Quack and to Dr. Quack's essence of vitality ; it is a mere change of gender : yet all this is done with the eyes open. The other element in the calculation is, how much nearer the regular practitioner approaches to certainty ; for if it be a mere point in the compass, a mere hair's breadth of difference, this advantage, though highly important in some cases, might not, in all, be so very essential. Now it is precisely on this ground that we object to exaggerated statements of the uncertainty of medicine ; because, if admitted, they go to diminish the very difference in question, and to bring the man of education and the regular practitioner more nearly, as respects his relation to his patients, on a level with the empiric and pretender. Let the requisitions of the profession be placed as high as they may, we believe none will more readily subscribe to them than ourselves. We are willing to admit that there is no branch of physical science with which the physician ought not to be acquainted ; no degree of patience in investigating truth, of vigor in reasoning, and of care in forming conclusions, which should be unknown to his mind. But that, after all this, his treatment of disease will consist of a mere series of inconclusive experiments, in conducting which he can derive little if any benefits from his personal experience, and from the stores of knowledge which he has gained from others—to assert this we hold to be equally unjust and useless. That Dr. Bronson has done this, we do not say ; but we should apprehend that with many readers the tenor of his argument might seem to bear this construction ; and that so far as it did so, the very object he so evidently aims at, that of promoting the dignity of learning and increasing the respect of the public toward the best part of the medical profession, would be interfered with, if not defeated. For the rest, we can only express the satisfaction with which we have read this essay, and we hope that its talented author will continue, by the exercise of a pen which he so well knows how to wield, to maintain the claims of real science against the pretences of ignorance and imposture.

The Physician's First Steps in Professional Life: An Address, delivered at the Medical Commencement in Washington, March 7, 1832. By THOMAS HENDERSON, M.D., Professor of the Theory and Practice of Medicine. Washington. 1832.

THERE are no species of writing so easy, and none that have a greater effect on those for whom they are intended, than farewell addresses to graduates, either in the arts or in medicine. The occasion is one of deep feeling on the part of the teacher and the taught, and the subjects on which that feeling may display itself are great in number, and of the most interesting kind. The past is full of recollections, diversified always, but generally pleasing;—an ample field, abounding in attractions to young and enterprising minds, and in obstacles to their attainment,—in the thorn and the rose, the cypress and the laurel,—full of dangers and difficulties, and presenting at its far extremity the smooth walk, and the shaded bower, where a few only are rambling or reposing. All this varied landscape lies in full view before the writer. Many of his pupils, to whom he is personally attached, and in whose fate his own happiness and reputation are in a measure involved, are just stepping on this perilous ground, just setting out on this arduous and hazardous journey. Surely, then, if he have a heart within him, he must be eloquent in reviewing the past, in surveying the opening prospects, and in pointing out to the young travelers the most dangerous places and the easiest avenues; in cautioning them against the paths that end in ruin, and pointing out those that lead to the high and pleasant grounds beyond. We can imagine few occasions so full of subjects for wise and eloquent discourse, or so full of excitements to it, as that of which we are now speaking. It gives us, therefore, less surprise than pleasure, when we peruse addresses of this sort, written in that smooth and flowing style which bespeaks deep feeling, and replete with sentiments at once touching and instructive.

Hence perhaps our disappointment in the address, the title of which is given above;—it is clumsy in style, feeble in instruction, without any noble sentiment to touch the heart, or a single strain of glowing eloquence to meet the expectations of the reader, or the occasion on which it was given.

The literary defects of this work are too numerous and palpable to need pointing out. The sentences generally are badly formed, stiff and lame, and words are used by the writer that do not belong, we believe, to any acknowledged language; and which, if they do, ought forthwith to be expunged. "How are you to render your profession," says the Dr., "other than the blind groping of empirical *routinism*?" After stating how strongly he had been tempted to adopt some theory of disease, particularly since the duties of a professorship devolved on him, he says "a desire to be useful strengthened the temptation, and personal fame urged me to become *a Systematic.*" Yet he glories in having resisted this temptation, which, according to the above statement, would have contributed to his usefulness ! "I am proud," says he, "of the unpretending yet independent character of an eclectic."

Again he says to his graduates, "you will soon stand the days-man between heaven and the afflicted." "The teacher's first step is to examine well the moral and intellectual materials he has to mould ; then he secures these for *a deliberate period.*" Such are a few specimens of the literary production of a gentleman who holds, in his own opinion at least, one of the highest stations in medicine. "It is only the accomplished physician," says he, "who is suitably qualified to discharge a duty not duly estimated. I mean the instruction of private pupils." And again, "In this way you prepare yourselves to fill the highest stations in medicine, I mean professorships in colleges."

Had we more time and space to devote to this address, we could point out other errors both of omission and of commission more important than those already alluded to. We will merely add the following extract :

> "Now, gentlemen, it is as much your duty to be good surgeons, as to treat disease skilfully. If with this sense of obligation you recollect that adequate skill is easily acquired ; if withal you look to personal motives, how near and easy the path is to surgical fame, and how brilliant that fame is, I do not see why you should not all be useful and successful surgeons."

The distinction here recognised between the duties of a surgeon and the treatment of disease, is altogether novel ; but the greatest mistake is in holding out to young men the idea that that task is easy which is unquestionably beset with difficulties—that surgical fame is easily acquired, when in truth it is the uncertain fruit of intense and patient labor. It requires no spirit of prophecy to predict, that failure and disappointment await those who shall attempt this lofty eminence with those ideas of its pathway which are thus held out by their Professor.

Whole number of deaths in Boston for the week ending May 25, 31. Males, 18—Females, 13.
Of croup, 1—measles, 5—throat distemper, 1—marasmus, 1—dropsy, 1—consumption, 3—scarlet fever, 3—apoplexy, 1—dropsy on the brain, 2—child bed, 1—lung fever, 1—unknown, 1—convulsions, 1—delirium tremens, 1—bowel complaint, 1—brain fever, 1—old age, 1—atrophy, 1—canker, 1.

ADVERTISEMENTS.

NEW MEDICAL WORK.
CARTER & HENDEE have this day received, An Account of some of the most important Diseases peculiar to Women. By Robert Gooch, M.D., Author of a Practical Compendium of Midwifery. In 1 vol. 8vo.

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PRECAUTIONS IN PRESCRIBING MEDICINES.

On various Circumstances important to be attended to in Prescribing Medicines. By William Howison, M.D., F.R.C.S., Lecturer on Mat. Med. at Edinburgh.

Independently of a knowledge of disease and of its treatment, much of the success of the medical practitioner depends upon various circumstances connected with the form in which medicines are administered, and the causes which regulate their action upon the animal economy. In prescribing a medicine, even the best qualified for fulfilling the purpose wanted, it becomes necessary to take into consideration the following important circumstances, and to regulate it by them :—

1, the age of the individual; 2, the sex; 3, the temperament; 4, the habit; 5, idiosyncracy; 6, situation in life; and 7, effects of disease on the system before the dose can be properly determined upon, and as far as the medicine itself is concerned, the most agreeable form of administering it—whether it should be given alone, or combined with other ingredients, and how far these are likely to impede or facilitate its operation.

Attention to all these circumstances is necessary to prevent the errors which so often occur in drawing up prescriptions; for nothing distinguishes the well-educated medical practitioner, or tends more to the future recovery and comfort of his patient, than the nature of his prescriptions. Doses of medicine are not reducible to any general rule, from their general similarity of operations, or any other circumstance; they are therefore specific with regard to each other.

I will now proceed to make a few practical remarks upon each of the circumstances already alluded to, as affecting the action of medicines upon the animal economy, considering them in the order which I have laid down above.

Age.—I commence this section with the table originally drawn up by Gaubrus, and copied from him by all successive writers to the present day, and which possesses no equal for perspicuity and correctness.

For an adult, suppose the dose (of any medicine) to be 1 drachm;

Under 1 year will require	1-12th or 5 grains.
2	1-8th or 8 grains.
3	1-7th & a half or 15 grs.
4	1-4th or 15 grains.
7	1-3d or 1 scruple.
14	1-half or 1-2 drachm.
20	2-3ds or 2 scruples.
Above 21, the full dose .	one or 1 drachm.
65, the inverse gradation of the above.	

From infancy to manhood, a larger dose of any medicine is required to produce its effects in proportion to the advance in life. From manhood to old age there is a similar gradation with regard to diminution of dose, though in a much less proportion than that which regulates the increase. In the two extremes of life, childhood and old age, the animal economy is weak, and susceptible of all impressions; whilst during the intervening period, or what is termed adult age, it remains stationary. From infancy to adult age, therefore, the dose of medicine should gradually increase. During adult age it should remain the same, and this is what is given in all medical works as the standard dose; whilst from adult up to extreme old age, it must again gradually diminish in quantity, but not in so rapid a ratio as it increased from infancy to old age.

With regard to medicines, however, it is of consequence to observe, that there are many which do not act with greater violence in a large dose than in one comparatively small. Ipecacuanha, as an emetic, is more certain in its operation when given in a large dose than in a small, and is not more violent. The same may be said of aloes and others. In fact, almost all the medicines included under the classes of emetics and purgatives, come under this observation. In the action of an emetic or purgative upon the animal economy, it seems probable that that portion of the medicine which comes into immediate contact with the internal villous coat of the intestinal canal, stimulates it to action, when the remainder will be thrown off or evacuated, without producing any further effect. From a large dose of such medicines, therefore, disagreeable effects are not to be apprehended. Whereas, when too small a dose is given, no effect is produced, the remedy remains in the intestinal canal, acting as an extraneous body, aggravating the symptoms which it was intended to relieve, causing the loss of valuable time. This remark applies to the generality of medicines.

Sex affects to a considerable extent the operation of medicine upon the animal economy. Although some women possess nearly as much bodily strength and vigor of constitution as the majority of men, yet the greater general delicacy and sensibility of the female frame, at every period of life, require not only caution in apportioning the doses of active medicines, which should be less than those ordered for men of the same age; but the medicines themselves should be such as are likely to fulfil the indications required without much violence. The state of the uterine system must be attended to in prescribing for females. Drastic purgatives, aloetic ones, and astringents, may be avoided during the flow of the catamenia.

Temperament affects the operation of medicines upon the animal economy. By temperament is understood a predisposition, derived from original conformation, to be affected in a more peculiar manner by external causes acting on the system; and much laborious investigation has been bestowed in distinguishing the different temperaments, or original conformation of body, and the diversities to which they give rise. It is undoubtedly true, that persons of different temperaments are differently affected by the operation of medicines. Stimulants more readily affect those of a sanguine than those of a phlegmatic temperament, and therefore smaller doses are required. In the phlegmatic, also, the bowels are generally torpid, and require both descriptions of medicines, and such doses of them to excite the proper peristaltic motion, as would induce either inflammation, or be followed by an alarming state of debility, were they administered to those of a sanguine temperament. Hence the necessity of attending to this circumstance in prescribing.

HABIT OR CUSTOM exerts a most important influence upon the operation of medicines. Persons addicted to the use of spirits, narcotics, and other stimulants, are less easily excited at an after period, both by medicinal stimulants and narcotics ; and the same takes place with respect to purgatives. A knowledge of the habits of the patient, as far as the exhibition of all these is concerned, is absolutely necessary for the prescriber, many people being in the almost daily habit of taking these remedies without consulting the practitioner. In the first of these cases, larger doses of stimulants and narcotics are required to produce the ordinary effects of these remedies ; but in the second a change of the purgative usually taken will generally be sufficient. In the employment of medicines which require to be long continued, the beneficial effect is soon lost if the dose be not increased.

In a few cases, the reverse of the above will be found to hold good, as, for example, with regard to the saline cathartics. As an example of the first of the cases alluded to, I may mention opium, one grain of which will produce upon an adult, unaccustomed to its use, all the effects of a narcotic; whereas ten grains will not do so at an after period, in the same individual, when long accustomed to its use. The first thing, therefore, that the medical attendant must do, upon being called in to a patient, previous to prescribing opium, is to ascertain whether or not he be in the habit of taking that medicine, and to what extent. The dose must be regulated accordingly. With regard to the saline purgatives, as sulphate of magnesia, the dose requires to be diminished after long use, half an ounce at last producing effects equal to one ounce at first. The same remark applies to castor oil.

SITUATION IN LIFE has a considerable effect in regulating the action of medicines upon the animal economy. Individuals of the higher ranks —and this applies particularly to females leading a sedentary life, little exposed to air, exercise, or variations of weather, not compelled to gain their bread by their own industry—are much more susceptible of the action of medicine, and of course require milder ones, and in smaller doses, than individuals belonging to the lower orders. In other words, a female of the lower orders requires as strong medicines, and as large doses, to produce equal effects, as a male belonging to the higher ranks, and *vice versa*. In the higher ranks, I have always found the common aloetic pill sufficiently active as a purgative; whereas, in the lower, it has generally disappointed me, proving weak or inert, so that I have for many years past been obliged to give it up, under such circumstances having recourse to the compound colocynth pill, which has always answered my expectations. The practice of dispensaries, hospitals, &c., and that confined to the lower ranks of life, as far as regards medicines, is considerably different. Upon a similar principle, the practice of different countries varies greatly, and that which has been followed by the practitioners of a place for ages, must always be superior to the innovations of the stranger. The population of France, Italy, &c., enjoying a settled, warm, southern temperature, and living principally on fruits, vegetable diet, &c., cannot bear the active medicines and practice adapted to the inhabitants of Great Britain, Russia, and other northern regions, exposed to every variety of weather, living upon animal food, and accustomed to the use of spirituous liquors. A wandering life passed in these countries firmly establishes the accuracy of this remark upon my mind. The treatment of syphilis in southern and northern latitudes,—its yielding without mercury in the former, whilst it absolutely requires its active ministration in the latter for its extirpation, may be given as illustrations of the above.

DISEASE exerts an influence on the action of medicine in the animal economy very important, the susceptibility to external impression and to action being much varied in morbid affections, and the operation of medicines of course being modified by such variations. The state of susceptibility being in general different when it varies much from that healthy standard, the doses of the medicine administered are regulated accordingly, and thus it is obvious does not admit of much general observation, as being entirely dependent on the nature and state of disease. I may mention, however, two striking extremes. In the diseases arranged under the class *febres* and *exanthemata* of Dr. Cullen's arrangement, all characterised by febrile action, the animal economy is remarkably irritable, and susceptible to stimuli; the mildest medicines, and in the smallest doses, produce powerful effects. In the diseases arranged under the class *neuroses*, of the same arrangement,—mania, melancholia, hypochondriasis,—all characterised by stupor and insensibility to stimulants, the most powerful medicines, and in the largest doses, are required to produce even moderate effects.

Besides these guides now mentioned in the administration of medicines, the choice of the practitioner must occasionally depend upon the circumstance of the patient being more or less immediately under the practitioner. Then, if the patient can be seen every day, or frequently, by the practitioner, the most active medicines which the nature of the case requires, should be chosen. But, if he cannot be seen, or is not resident in the same place, the practitioner should choose a remedy of the same class, but less likely to have a violent effect. Thus, in prescribing for intermittent fever, where a patient cannot be visited every day, or oftener, the Peruvian bark should always be preferred to the arsenical solution. In dropsical complaints, the supertartrate of potash, to the digitalis or elaterium.

In apportioning the dose of any very active medicine, it is of the greatest moment to determine the relative degrees of power between the system and the remedy, and to know to what extent the latter is likely to be carried consonantly with the power of life to resist it. Thus, after a patient has been exhausted by protracted or severe suffering, a dose, different or milder than one at the commencement of the disease, becomes necessary.

THE VARIABLE ACTIVITY of a medicine should also be appreciated, and the practitioner would act judiciously, if he were to reduce the dose, should it be a very considerable one, whenever a fresh parcel of a medicine is commenced, especially of the powders of active medicines, liable to deterioration from being long kept,—those of cicuta, digitalis, &c.

The time of day at which remedies should be administered, likewise deserves attention. Evacuating medicines ought to be administered late at night or early in the morning. It would seem, that during sleep the bowels are not so irritable, and consequently not so easily acted upon, which allows time for the ready solution of the substance. The same observation applies to alterative and other medicines, which are liable to suffer from vexatious irritability of the bowels. It is on this account eligible to exhibit guiacum, pil. hydrargyri, &c., when they are not intended to purge, at bed-time. On the other hand, when the effects of a medicine are likely to be lost by perspiration, as is the case with diuretics, many of which are by external heat changed into diaphoretics, it becomes a question with the judicious practitioner, whether he cannot select some more favorable period for their exhibition. Medicines which are in the form of a pill, as they are liable to be long kept in apothecaries' shops, and of course to become remarkably hard, should generally be administered at bed-time, to give time for the gastric juice and other secretions of the intestinal canal to complete their solution. Under these circumstances, they will pass through the whole tract of the bowels as inert bodies, disappointing the intentions of the practitioner and patient. Aloes, administered in *powder*, operates in from two to three hours; given in *pill*, it requires from eight to twelve hours to produce its full operation.

In Fevers, it is of importance to consult in all respects the quiet and comfort of the patient. Dr. Hamilton, in his admirable work on purgative medicines, justly observes, that on this account the exhibition of purgatives should be so timed, that their effects may be expected during the day. In some cases, the time of administering the remedy must be regulated by the stage of the disease. In fevers, a dose of opium will either increase the heat of the fever, augment the thirst or restlessness, or occasion tranquillity and sleep, according to the temperature of the body at the time of its administration. For this reason, Dr. Currie advises us not to give the evening dose of opium in typhus fever till very late, or about one or two o'clock in the morning, when the heat is subsiding, and moisture coming on.

Emetics, administered for the cure of the slighter cases of pyrexia, should be given in the evening, as their operation has a tendency to sleep and diaphoresis, which it is useful to promote. Remedies that require to be absorbed, will probably be more efficient in the morning, after sleep. The old custom of giving medicines in the morning, fasting, is not quite so absurd as some modern practitioners have been led to suppose. A weak or mild medicine, taken two hours before breakfast, upon an empty stomach, will operate equally powerfully as a much stronger one will if taken at a later period, or upon a full stomach. Every practitioner must be struck by the truth of this remark, when administering mineral waters, as those of Cheltenham or Harrowgate.

The intervals between doses of medicine must be regulated by the nature of the remedy, and that of the object which it is intended to fulfil, and whether it be desirable or not that the last dose should support the effects of the preceding, or whether there be any fear of a re-action or collapse taking place after the effect of one dose has subsided, unless immediately repeated. Thus the effects of diffusible stimulants, ammonia, or of ether, are very evanescent; they should therefore be repeated at short intervals. The same may be said of diaphoretics. We ought not to allow the periods between the doses to be so remote as to occasion any striking abatement in the impression. So opium, when stimulant operation is required, as in diseases of debility, fevers of the typhoid kind, &c., should be given in small doses, at short intervals, so that it may produce a uniform and regular state of excitement. But when the object is to mitigate pain, allay irritation, and produce sleep, it ought to be exhibited in full doses, at distant intervals. There is a caution, also, which it is very necessary to impress upon the practitioner, respecting the power which some medicines possess, of accumulating upon the system. This is notorious with regard to lead and mercury. Dr. Withering has observed, that the repetition of small doses of digitalis, at short intervals, till it produces a sensible effect, is an unsafe practice, since a dangerous accumulation will frequently take place, before any signals for forbearance present themselves.

From a COMBINATION of medicines, beneficial and mild effects result, which would not be produced by any of them given separately. From two distinct emetics, combined together, or from two distinct purgatives, an effect results, which is far more certain and mild, than from either of the two administered separately; and the same holds good with other medicines.

In prescribing medicines, the principal object to be kept in view is simplicity, and this was greatly neglected in the prescriptions of former days, and is even so still in those of surrounding countries. This is strongly remarked by Dr. Boyce, in his Sketch of Medical Knowledge at Constantinople, recently published. Dr. Paris informs us that he was told, by a medical practitioner in the country, that the quantity, or rather complexity, of the medicines which he gave his patients, for there never was any deficiency in the former, was always increased in a ratio with the obscurity of their cases. "If," says he, "I fire a great profusion of shot, it is very odd if some of them do not hit the mark!" Sir Gilbert Blane, in his *Medical Logic*, has given us a similar anecdote. A practitioner, being asked by his patient why he put so many ingredients into his prescription, is said to have answered, more facetiously than philosophically,—"In order that the disease may take which it likes best."

With regard to the directions in a prescription, how many medicines are to be taken, they ought always to be written distinctly, in the vernacular (English) language. In prescriptions, perspicuity is our first object; it is not here that a medical man is called upon to display his learning; and by clearness,—by writing the directions distinctly,—he puts it out of the power of any individual to injure his reputation, or to endanger the safety of the patient.—*The Lancet.*

EXEMPTION OF INFANTS FROM CONTAGION.

On the Exemption of Infants from Contagion, particularly with reference to Vaccination. By John Murray, M.D.

Cape of Good Hope, August, 1831.

Children were chiefly the subjects of its attack (Scarlatina), but many grown-up persons of both sexes got it also, some of whom were above forty years of age, and in them it was often very severe : *infants*, however, seemed generally to enjoy the privilege of exemption from its attack, as if their systems were insusceptible of the morbific effect of the contagion. Of two families who fell under my particular observation, the youngest of each (both babies in arms) entirely escaped, although all the other children were attacked ; and I know a great many other instances of similar exemptions. I myself did not see any child under a year old with the disease during the whole epidemic of 1830 ; no such case occurred amongst the military, and I have not been able to hear of more than three or four instances, in civil practice, where infants at the breast became affected :—they were all upwards of eight months old, and the disease in them was not of a severe nature.

This greater exemption of infants is a circumstance which I think has not been particularly noticed by writers on Scarlatina ; but it is an important fact, which I have to point out for further observation. Neither Huxham nor Fothergill advert to it. Dr. Withering, in his observations on Scarlatina, as it appeared at Birmingham in 1778, states, that it seldom occurred in children under two years of age : and Dr. Sims, in his full account of this disease in London in 1786, mentions, that he saw but one child at the breast who had it, and that but slightly. I am inclined the more, however, to believe in the insusceptibility of infants to the Angina Exanthematica, as the same has been found to obtain in other contagious diseases ; for example, Dr. Hennen mentions, on the authority of the hospital surgeon, Mr. Naudi, that in the plague at Malta, in 1813, several instances occurred, in which children sucked their dying mothers without contracting the disorder from them ; and Mr. Kite, of Gravesend, in his paper on smallpox, in the "Transactions of the Medical Society," states, that "he had occasion frequently to observe that very young children had been repeatedly inoculated, and for several weeks constantly exposed to the worst kind of smallpox, without any effect ; that afterwards the measles became unusually rife, of a putrid nature, and much more contagious than he ever before or since observed it ; that he attended in several families where the young infants (particularly when under two months) were the only part of the family that escaped the disease, although exposed a considerable time to the infectious air, and laying all the night close to other children passing through every stage of the complaint, and consequently inhaling into their lungs the very essence of infection ; nay, he had been informed of more than one instance, where, in addition, the mother had the disease, and the child, although constantly in her arms, breathing the air reeking with putrid particles, and sucking the milk impregnated with the disease, strongly, as we should think, has for months withstood the infection."

From reflecting on this degree of insusceptibility of infants to the influence of contagion, I have been led to consider, that it may perhaps be owing to the circumstance of persons being vaccinated in infancy, while their constitutions are but imperfectly susceptible of the action of the vaccine virus, that vaccination has been found not to prove a perfect preservative against the influence of smallpox contagion.

It is most usual to vaccinate children within three or four months after birth, with a view to protect them from smallpox during the rest of life; but the instances in which it has failed to afford perfect protection, have of late years been so numerous in different countries, as to have caused considerable distrust in the minds of the public relative to the utility of the operation ; and I believe there are few intelligent parents who do not now entertain more or less anxiety and apprehension about their children on this score, when they send them out into the world.

These failures of vaccination have been attempted to be accounted for by medical men in various ways, such as that the operation might have been improperly performed, or performed when the infant was laboring under some other eruptive disease, or that the course of the vaccine disease might have been interrupted by the pustules having been punctured or broken, or that the virus might have been of a spurious description, or that time had diminished the protecting virtue of vaccina, or that in certain cases of failure it might have been owing to some idiosyncracy or peculiarity of constitution in the patient himself; but it must be confessed, that all these reasons are unsatisfactory and untenable in the majority of cases.

I do not know if the idea be new or not, which I have here broached, that the failures may probably be attributed to the operation being performed at an age when the constitution is insusceptible of undergoing the regular process necessary to preserve it from the influence of variolous contagion ; but, from the circumstances I have just mentioned, I think it is likely to be as correct as any other I have yet known brought forward.

I have not an opportunity of ascertaining whether, in the late variolous epidemics in Europe, any difference was found in the anti-variolous protection afforded in the cases vaccinated at the age of a few months, and in those in whom the operation was not performed till after three or four years of age ; but I feel anxious that this subject should be investigated, as it may be found to elucidate many of the obscure points connected with the subject of the protection in some, and the complete failures in other cases, that have hitherto eluded explanation, and I the more hope that it may prove correct, as we should then be enabled to prevent failures hereafter. As connected with this point, I have further to add, that I have known a strong effect to be excited in the constitution of adults from re-vaccination ; and reasoning on this circumstance from analogy, we should suppose it could not happen if their system had undergone the proper vaccine action from the primary operation ; and if it be granted, as I believe it now is, that there is no just ground for the opinion that the prophylactic virtue is altered or lost in the constitution after a certain time from the date of vaccination, then I think that my supposition is greatly strengthened by another circumstance, which is, that when re-vaccination has been instituted in adults, it has been found to preserve them more effectually from smallpox and its modifications; of this, a good instance came within my own knowledge, of a family in Scotland, which escaped infection through this means, when a variolous and varioloid disease was raging epidemically all around it.

Were my children to leave this colony for England, or indeed for any place where there was a chance of their being exposed to smallpox, I should certainly have them all re-vaccinated, by which means I should consider them to be rendered more secure against the influence of its contagion.—*Medical Gazette.*

CHOLERA AND TYPHUS FEVER.

On Cholera and Typhus Fever. By JOSEPH COMSTOCK, M.D., of Lebanon, Con.

Communicated for the Boston Medical and Surgical Journal.

THE excitement and terror of the two worlds,—the *old* and *new*,—respecting Cholera, has induced the medical faculty to reflect, investigate, and write, upon the disease, even when 3,000 miles distant. This is perfectly judicious and philanthropic. Every particle of light, which can be shed upon a disease so terrible, ought to be put in requisition, so that the monster, should it appear, may be met at the threshold, with appropriate weapons in readiness and complete order.

Cholera, or, as it is vulgarly called, *Cholera Morbus*, is with us no new disease. What would be *new* to most of us, who, like myself, have been in the practice of medicine for even thirty years and upwards, would be, to lose a *single patient with it.*

We have, however, never known a case of the disease exactly like those of Europe and the East. In those countries, the worst cases appear to be a rapid and total nervous annihilation. In these extreme instances, there is no re-action of the system, and no time for such re-action.

The first stage is a dying state,—the second stage is death itself! An eye-witness says,—"Within twenty minutes of the attack, the vital functions become utterly paralysed, pulsation ceasing at the extremities, animal heat becoming almost wholly extinct, the surface of the body, lips, tongue, mouth, and face, assuming a deadly, cadaverous, and leaden tinge,—to the touch cold as marble." * * * "Boiling water, spouted on the extremities, fails to produce a momentary blush, much less a vesication."—This, we are told, "is the character of Cholera of the worst type, such as has appeared in Sunderland, Houghton la Spring, Gate's Head, Newcastle-on-Tyne, and other parts of the north of England."

We are further told, that *post-mortem* examinations have done little towards eliciting the pathology, or mode of cure, of this terrible epidemic.* These features and facts are certainly appalling; but it is our imperious duty to know the worst, and to be prepared for it.

Perhaps the time has arrived, in which we shall be able duly to appreciate the labors of our chemical brethren, who have been separating the most active principles of our most active medicines.

Opium, of itself, would appear to be too powerless to meet this Goliah; but its active and concentrated principles may be found equal to the emergency.

Morphine, a remedy so potent that one sixteenth of a grain is a dose, promises something. Where even this small quantity cannot be swallowed or retained, it acts externally in larger quantities, as in one, two, or more grains, the skin being denuded of its cuticle in the first place. When vesicatories fail of accomplishing this, it may be done by the lancet. The patient may, in fact, be inoculated with this powerful narcotic and stimulant, or it may be used *pro injectio*, with diluted alcohol and other stimulants, such as a decoction of capsicum, a solution of pepperine, tinct. lytta, or spt. turpentine, if injection can be retained.

But to discover some prophylactic,—some supporting, invigorating plan, which would render the human system wholly or partially invulnerable to the impressions of the potent enemy,—is the grand desideratum. Opiates, in some form or combination, would appear to promise most for this all-important purpose.

Supposing that the epidemic should visit Boston, or any other of our cities or towns, those in health should be provided with some of the preparations of thebaic, and, under the direction of their family physician, make such use of them as age, sex, constitution, and idiosyncracy, would seem to justify.

Small doses of opium might be taken, in substance, in form of pills, or laudanum in combination with ol. of peppermint, ol. of cinnamon, ol. of lemon, spt. lavend. comp., aq. ammonia, vol., camphor, capsicum, pepperine, quinine, or Huxham's tincture; or the citrate or sulphate of morphine might be used, in combination with either of these articles, or clear, as judgment, or even fancy, might dictate.

Those of the profession who saw some of the worst cases of spotted and typhus fever, appropriately termed by my friend, Dr. Miner, *typhus syncopalis*, which prevailed from 1806 to 1814, and in some places after the latter period, know something of a disease which approximates more nearly to the eastern cholera than anything that has been known in the United States. Confounded, in my own practice, with the rapid tendency of that disease to speedily run the patient down to the lowest state of debility, and thus to prove fatal,—confounded, also, by the inefficiency of all that I found written upon it, except by a few of my own contemporaries in this country,—I resorted to a practice the most decidedly stimulant, with the happiest effects. Five hundred and seventy-five cases of this epidemic and its congeners fell under my care, from 1810 to 1814, both inclusive.* Among a great variety of cases, I have those of three sisters, out of ten brothers and sisters who had it, particularly in my recollection. One of these was a little girl in her 10th year. I found that wine did not reach her case, with all the aromatics and stimulant additions which I could get down. In this stage, she was visited by me with one of our eminent professors, who told me, as we came out of the house, that *I should lose my patient.*

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* One important fact has, however, been discovered by dissections. It is what I call the *death of the arteries*, they being found empty. This death-state of the arterial system has been discovered a little before death. This discovery was made at Berlin, where, for the purpose of *transfusion*, the brachial artery was denuded, opened, and found empty! It is a disheartening discovery, because its causes remain undetected in the dead subject, by the most skilful anatomists. One of the most eminent of this class, the late Dr. Wistar, of Philadelphia, informed me, whilst I attended his lectures, that for six years he had studied and investigated this phenomenon without being able to satisfy himself of its cause. Connected with this subject, I have one important *quere* to propose to the anatomists of Boston and elsewhere, viz.:—*Can a colored injection, thrown into an artery of a living animal, be detected in the veins of that animal?*—In the dead subject, it is well known that it cannot.

I then resorted to alcohol, in the form of strong W. I. rum. I told her mother, who was a most excellent nurse, that she must get down enough to warm her child, let it take what quantity it would. A pint of this article, diluted with water and dulcified, was given and retained the first 24 hours, and as much or more for several succeeding days, with some wine and opiates. She was saved.

The second was her sister, in her 13th year. The symptoms of extreme exhaustion, coldness of her lower limbs, which reached above her knees, indicated speedy and seemingly inevitable dissolution, and this under the use of a quart of wine a day! Some good French brandy was then resorted to, and the same quantity of wine continued. She took for the first 24 hours a whole quart of wine, and a pint and three gills of the brandy, with bark, aromatics, and opiates; and for several successive days these quantities were not diminished, except the brandy only, and that not more than a gill. She retained these enormous quantities, never ejecting them from her stomach, and was also cured; and, I may add, without any detriment to her constitution. She afterwards became a healthy young woman, got married, and with her husband came to visit me at my present residence in Connecticut.

The third sister was a young married woman, who lived five miles distant. The epidemic of which we are treating sometimes assumed the form of cholera. This was the case with Mrs. H. The puking was excessive; the diarrhœa not quite so urgent. I, however, at first despaired of her recovery, because, with alarming debility, her stomach did not permit the retention of any remedy whatever. Her husband was a merchant and grocer, and had in his store good spirits of fourth proof. With the addition of laudanum, enemata of this article were resorted to, and happily retained. Nine gills of the spirit, a little diluted with milk and water, were administered in speedy succession, one gill each time, with about one drachm of laudanum. She was likewise saved, and her recovery from the most frightful state of exhaustion and nervous derangement was complete.

Although the free and liberal use of ardent spirits was found thus useful as a *remedy*, and may be equally so in cholera, yet, as a *prophylactic*, I consider them hazardous; for I found that no class of persons were so liable to die with typhus, as those whose constitutions were broken down by intemperate drinking.

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* The writer at this time resided at S. Kingstown, R. I.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, JUNE 6, 1832.

ACTION OF EMETICS.

Among the means which the medical art possesses of acting on the human system, none, perhaps, is more decisive, and more powerful, than the administration of substances calculated to produce vomiting. If we review the serious diseases to which the human frame is subject, taken simply with regard to their number, we shall probably find a large proportion in which this remedy is indicated ; and, when the comparative frequency of these and the remainder is taken into view, the importance of emetics, as a class of therapeutic agents, is still more manifest. It becomes, then, a point of no small interest, to consider what indications this class of remedies may be judged capable of fulfilling ;—in other words, what may fairly be set down as effects of emetics on the stomach and general system, by which we are enabled to remove disease.

In considering this subject, it might be thought necessary that the expression, *emetics*, should be more exactly defined, and that the inquiry should be directed to the action of single substances of this class, either solely, or at least in succession. But the truth is, the specific differences between the action of the different emetics in common use, is in small proportion to their activity as a class. Ipecacuanha and antimony, for instance, if given in sufficient doses to cause vomiting, of which effect, in ninety-nine cases in one hundred, either of them is capable, produce effects on the system, not indeed strictly analogous, but still agreeing in those points in which the action of both is most important and interesting. It is for this reason, no doubt, that the emetic substances actually employed are so few in number; a circumstance which, while it simplifies this branch of practice, renders it also more easy to arrive at a distinct and satisfactory theory.

The first and most obvious effect of artificial vomiting, is to discharge from the stomach any foreign substances which happen to have been introduced into that organ. In fact, the effect of an emetic, administered when the stomach is surfeited with food, is sometimes limited to fulfilling this simple indication. In this respect, the vis medicatrix is often remarkably displayed, and nature herself provides that the direction and amount of the effect produced shall be just that which the circumstances of the case happen to render necessary. This is often peculiarly manifest in children, in whom the exhibition of a powerful emetic is often found to limit itself to a single act of vomiting, which brings up the contents of the stomach, and leaves the system to all appearance as little disturbed as if the ejection of these foreign matters had been the spontaneous act of the organ.

2. A second effect of emetic substances, is a change in the action of the hepatic organs, by which a quantity of bile is thrown into the stomach, and thence rejected by vomiting. This would seem to prove, that the antiperistaltic action, which is excited under these circumstances, extends to the duodenum, and that the bile which is there accumulated is in consequence thrown up. But, beside this, there can be no doubt that the liver is excited to increased action, and that, in most cases, where bile is discharged, only a small proportion can be viewed as having previously existed in the duodenum. It may be doubted whether the action of an emetic be ever limited to a simple emptying of the duodenum from the bile previously accumulated there; but this point is not susceptible of direct proof.

3. Of the more remote effects of emetics, some are produced in the alimentary canal itself, while others are exerted more generally on the system. The most remarkable circumstance in the action of emetics on the stomach and bowels, is their tendency to counteract at one time the very state which at others they are calculated to produce. It was remarked, as a singular fact, by Celsus, that vomiting opens the bowels when costive, and binds them when relaxed. Its action in the first mode we have less opportunity to observe than was enjoyed by the ancients, by whom the remedy was employed on much slighter occasions ; but it is a matter of familiar observation, that what is termed hepatic jaundice, which seems to be owing to a torpid state of the liver, and of which constipation is the leading symptom, often disappears under the use of this remedy, as by a charm, when cathartic remedies have been repeatedly tried in vain.

A somewhat obscure state, usually termed bilious, attended with nausea, loss of appetite, and costiveness, which with many persons recurs regularly at a certain season, is also most effectually relieved by artificial vomiting. The effect exerted by this remedy in the opposite state, or that of increased peristaltic action, is equally remarkable. A diarrhœa, which proves obstinate under the best regulated diet, and resists the action of cathartics, astringents, and sedatives, will often be found to yield without delay under the judicious administration of an emetic. It is not easy, without a somewhat liberal use of hypothesis, to reconcile effects apparently so contradictory. In the last case, it would seem that the peristaltic action once inverted, the irritability of the muscular texture receives a powerful check, and that, by the tendency of extremes to produce each other, of which so many examples are presented in the system, the fibres return to a state of comparative torpor.

4. A more remarkable proof of the tendency of emetic substances to produce a state of things the reverse of that pre-existing in the system, is found in the fact, that vomiting itself, which has continued obstinate in spite of other remedies, is not unfrequently relieved by this means alone. Of the truth of this position, experience furnishes abundant proof. The nausea and vomiting, which follows upon surfeit after the offending substance has been rejected, can often be relieved only by full vomiting; and the irritability of the stomach, with which fever sometimes makes its onset, is usually dissipated by the same means. Among the million remedies which have been proposed for the cholera, its treatment with full vomiting at the outset is recommended by as many, and as striking instances of success, as perhaps any other. We intend this, indeed, principally of the disease in its sporadic form; for cholera, when epidemic, seems to acquire a prostrating power in its first onset, which almost forbids any hope of success from so harsh a remedy. Cases, however, are not wanting, to show that even in this terrific form of disease, the prompt exhibition of an emetic will sometimes arrest the symptoms. This practice is indeed most likely to be effective when the case appears to have been induced immediately by imprudence in diet.

An interesting paper, on the employment of emetics in cholera, will be found in the April number of the Edin. Journal, by JAMES HALL, Surg. R.N. The author's opportunity of observing the disease, arose from the circumstance of his having charge of several ships of war, lying in ordinary in the river Medway, in the fall of 1831. The occurrence of the disease in these vessels, which had previously been healthy, is supposed by the author to have been connected with the arrival of several vessels from Riga, where the Asiatic cholera was then raging. However this might be, the first case occurred in July, and, between this and October, 120 cases occurred in a population of 700 persons. Many of these were of course mild; many, however, were severe, and a few are described as having presented that peculiar livid aspect, which has been regarded as diagnostic of Asiatic cholera. On these points, however, we can convey no information to our readers by quoting insulated facts; the amount of the disease can only be judged of by reading the cases, which appear to be judiciously and candidly stated. Considering nothing but their number, it is certainly remarkable that not a single case proved fatal. All, without exception, were treated with an emetic of ipecacuanha, repeated till full vomiting was occasioned, followed up by an opiate, and subsequently a cathartic. The emetic, he observes, was said by the patients to have operated like a charm. "However violent the purging had been,—however incessant the nausea and retching, both ceased after the vomiting." Whatever may be thought of the author's theory in regard to the origin of this disease, the result of his practice certainly merits notice.

A somewhat bolder use of this plan of practice, pursued by a physician in the department of Saratov, in Russia, during the prevalence of epidemic cholera there, is mentioned by Lichtenstadt. On the first appearance of the disease, eight grains of antimony were exhibited in a glass of water. The vomiting and purging thus produced, it is observed, carried off the bile from the stomach and bowels, and on this operation followed decided improvement. This was the treatment in the more violent cases. In those less severe, four, or even two, grains were given; this was followed up with other remedies, calculated to obviate the various symptoms as they presented themselves; none of these, however, are particularly remarkable. This practice is stated to have been attended with favorable results.

The more general effects, on the system, of vomiting artificially excited, will be the subject of consideration in a future number.

Poisoning by Goose Grease.—On the second of April, 1829, Dr. Siedler was called to attend MM. H——, and their children. On his arrival, he found the two brothers H——, one aged thirty-one, the second twenty-eight years, and the two children of the first, one a girl, æt. four, and the other a boy, æt. two and a half, all presenting the following symptoms:—cold sweat, anxiety, vertigo, general paleness and prostration of strength, eyes sunken and pupils dilated; burning pain was felt in the lower part of the belly, increased by pressure; violent vomiting, succeeded by ardent thirst, for which the patients had drunk large quantities of milk, which was thrown up without producing any effect; tongue dry, involuntary discharge of urine and fæces.

The eldest brother was insensible for six minutes; his respiration was scarcely visible, his pulse imperceptible, and the heart's action exceedingly weak. The second brother had vomited blood several times, but he experienced less abdominal pain than the other. In the little boy, the globes of the eyes were turned upwards, the lips livid, and the pulse scarcely sensible. Lastly, the symptoms in the little girl were the mildest of all. M. Siedler suspected at once, that these accidents were occasioned by the use of a certain quantity of goose grease, which had been employed in the preparation of some meat, of which the four patients had eaten shortly before the symptoms began. An emulsion, containing hyoscyamus, was prescribed, and on the 9th of April all had recovered.

The vomited matters were subjected to chemical analysis: they were strongly acid, but contained no metallic poison; but the following facts induced Dr. Siedler to attribute the illness to the effect of sebacic acid. The lady of the house had made use of goose grease to dress some veal, and all the persons who partook of the dish fell quickly sick. The lady herself, who had barely tasted it, felt it so disagreeable that she took no more. None of the grease which was suspected to have caused the accident remained for examination, the pot which contained it having been entirely emptied and cleaned out; but, on examining the same kind of grease contained in three other pots, it was found to exhale a strong repulsive odor, and it reddened strongly blue paper tinged by turnsolo. Three ounces of this grease were given to a vigorous, well-formed dog;

an hour after, his extremities became violently convulsed; he cried piteously, he refused to eat, his eyes were suffused, pupils dilated, skin cold, and arterial pulsations scarcely perceptible. In this state he continued for thirty hours, after which he slowly recovered.—*Hufeland's Journal.*

New Method of Destroying Rats.—M. Tenard lately read a note to the Academy of Sciences in Paris, in which he recommends the following as a simple and effectual method of destroying rats:—If there be several of their holes, begin by closing them up; those in their most frequent routs will soon be re-opened, and in this way their chief resorts will be discovered. Introduce into one of the apertures (again closing the others) the mouth of a glass retort, and make it air tight with common luting. Sulphuret of iron is then to be introduced into the apparatus, by the tubulure, and diluted sulphuric acid poured cautiously upon it. Sulphuretted hydrogen is evolved, which, entering by the hole, penetrates all the crevices into which the rats may retire, and speedily destroys them.—*Gazette Medicale.*

New Mode of Effecting Instantaneous Vesication.—Cut a piece of linen, cotton, or paper, of the desired size and shape; dip it in spirits of wine, eau de Cologne, or even in strong brandy; wring it or wipe the surface, that none of the fluid may trickle from it to the adjoining skin; lay it on the part intended to be blistered; apply a lighted candle or paper, carrying the flame rapidly over the whole surface, that it may all take fire at once. The ignition does not last a minute, and the cuticle will be found to be detached, and easily separable from the cutis.—*Bulletin de Therapeutique.*

Whole number of deaths in Boston for the week ending June 2, 34. Males, 14—Females, 20.

Of debility, 1—consumption, 7—convulsions, 2—gravel, 1—old age, 2—measles, 5—croup, 1—lung fever, 1—scarlet fever, 3—throat distemper, 3—drowned, 1—inflammation on the lungs, 1—unknown, 2—inflammation on the brain, 1—infantile, 1—inflammation in the bowels, 1—stillborn, 2—intemperance, 1.

ADVERTISEMENTS.

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EFFECTS OF MINUTE DOSES OF MERCURY IN RESTORING THE VITAL FUNCTIONS.

A LATE number of the London Medical Gazette contains a long, and very interesting and instructive essay, by Dr. A. P. W. Philip, on the subject mentioned above. Dr. P. gives a minute but general exposition of the modus operandi of mercury and its different preparations, of the comparative advantages of its various modes of administration, of the cases to which minute and frequently repeated doses are adapted, and the circumstances to be attended to in their employment. We omit those parts of the paper which will be least important to the reader in a practical view, and offer below his remarks on the modus operandi of this remedy, given in the manner recommended, in chronic diseases.

I had occasion to observe, in speaking of Mr. Abernethy's plan of exhibiting mercury in diseases of continuance, that when it fails there is another which is often successful. This consists simply in greatly lessening the dose, and in the same proportion increasing its frequency.

The benefit derived from this change depends on the most fundamental laws of our frame. All agents, capable of affecting the living animal body, act both as stimulant and sedative, according to the quantities employed; and we call them by one or other of these names, according as they are best fitted to produce the one or other effect.

Spirit of wine we call a stimulant, because in all moderate quantities it produces the stimulant effect; but there is a quantity of it, as appeared in the riots of Lord George Gordon, when many of the mob took draughts of spirit of wine, mistaking it for common gin, which produced instant death without any degree of previous excitement. Digitalis we call a sedative, because in ordinary doses it acts as such; but it appears, from very accurate experiments, that in extremely minute doses it acts as a stimulant.

Mercury is one of those agents in which the stimulant and sedative effects are so nearly balanced, that neither predominates so much as to obtain for it either appellation; but it observes the same law as all other agents capable of affecting the living animal body. In small or moderate doses, the stimulant effect prevails; in excessive doses, the sedative; and the repetition of even moderate doses, unless at very distant intervals, seldom fails at length to produce more or less of the latter. Is there a dose, then, so small as to produce little or no sedative effect, and yet capable of the stimulant effect on which we have reason to believe the beneficial tendency of this medicine always depends ? Is there a dose in which, in most constitutions, the sedative effect either does not take place, or takes place so slowly that the cure may be far advanced before the patient begins to experience any degree of it ?

The result of my experience is, that there is such a dose.

With respect to its amount, it varies from half a grain of blue pill, the largest dose I almost ever employ with a view to the alterative effect, to the eighth part of a grain, the smallest dose from which, in general, much good can arise, though there are cases, in particular constitutions, in which I believe much smaller doses than even this will be found beneficial, and the interval at which the dose has been given is from six to eight hours. By these doses, given at such intervals, we can in most constitutions, and for a considerable length of time, in some for an unlimited time, obtain the stimulant without the sedative effect of the medicine, which is the great object in the employment of mercury. We thus, as far as the particular constitution is capable of it, secure the whole of its beneficial, without any degree of its injurious, effect.

As soon as the latter is perceived, it must either be obviated, or the medicine laid aside ; for nothing will compensate for the sedative effect of this medicine, whether produced by large or small doses. It is as certainly injurious as the disease, but, as in the case of the medicine, it is always in our power to remove the offending cause ; in the hands of a prudent practitioner, we have the chance of benefit without the risk of injury, unless the certainly fatal nature of the disease makes it advisable to risk, to a certain extent, the sedative effect of the only means of cure.

With respect to the minute and frequently repeated doses, I would say without hesitation, and from ample experience, that in all cases, except where the great discharges, or other rapid effects this medicine is capable of producing, are required, they are not only the safest, but the most effectual, mode of exhibiting it. Their operation appears to be that of a gentle but constant stimulant, exciting to due action the various organs of assimilation, and particularly the liver. The following case is strikingly illustrative of their power in producing the peculiar effects of the medicine, and I could add many others of a similar nature :—

A lady came from a great distance to London, for the purpose, she said, of being salivated, which she had been told would cure her of a bilious complaint, under which she had labored for many years. For this purpose she had taken in vain, in the country, very large doses of mercury, much beyond the largest usually given in this climate. I saw no occasion for salivation, but directed her, with other means, half a grain of blue pill three times a day. Her case did not require frequent visits, and not being then so well acquainted with the effects of the plan, I thought, as the mouth had resisted such doses, that no precautions respecting it were necessary, when, at one of my visits, after she had taken the medicine for about a fortnight, I found her in a state of severe salivation ; the whole of the face was swelled, and she was for a considerable time confined to bed. At no great distance of time she left London well, and I learned from her sister, who two years afterwards was placed under my care, that she remained so.

It is not difficult to perceive the principle on which the minute doses are so powerful. From their little aperient tendency, they readily enter the system, and, from the little irritation and excitement they occasion, they are not apt to be thrown off by it. Such cases as the preceding, and I could mention many, in which a certain affection of the mouth arose from even smaller quantities, which, had they been continued, would soon have produced the same effect as in the preceding case, prove that the peculiar effects of mercury may be obtained in any degree we please, by small doses. What, then, can be the motive for employing larger ones, unless, either from the nature of the symptoms, or the urgency of the case, the more active effects of the medicine, or the more rapid impregnation of the system, be required; or, as happens in certain diseases, the powers of the absorbing vessels are so impaired, that minute doses are no longer capable of exciting them, and therefore cannot enter the system?

The cause of minute doses sometimes producing an effect on the gums, when larger doses fail, arises from the latter being so much more powerful in exciting the excretories, by which, in certain constitutions, they are often thrown off as fast as they are taken, and thus little impression is made, either on the mouth or the disease. It is to the thorough manner in which the minute doses are received into, and retained in, the system, and the general, steady, and gentle impression they make, that they owe an efficacy which surprises those who have not been accustomed to see their effects.

Such doses, of course, have little effect in suddenly emulging the biliary ducts, and thus discharging collections of vitiated bile; and, until they succeed in restoring the due action of the liver, which in general requires some time, the collections are in many cases more or less apt to form under their use, and occasionally to require the operation of a more active mercurial, the necessity for which is different in different cases, according to the tendency to such accumulations. Where there is no tendency of this kind, the active dose is unnecessary, and its frequent repetition is seldom proper. Calomel, we have seen, generally answers the purpose of the larger dose better than the blue pill, although, in the more obstinate cases, I have sometimes found a combination of the plan I am now describing, and that of Mr. Abernethy, the most successful.

THE CHOLERA IN PARIS.

The following account, which is, no doubt, a correct one, is from the pen of Mr. N. P. Willis, of this city, now in Paris. It composes the latest of those epistles published and publishing in the New York Mirror, under the head of "First Impressions of Europe;" and, as it was written by an intelligent, although not a medical, observer of the epidemic lately so rife in the French metropolis, it is recommended to the attention and implicit credit of the reader.

You see by the papers, I presume, the official accounts of the cholera in Paris. It seems very terrible to you, no doubt, at your distance from the scene, and truly it is terrible enough, if one could realize it, any where; but many here do not trouble themselves about it, and you might be in this metropolis a month, and if you observed the people only, and frequented only the places of amusement and the public promenades, you might never suspect its existence. The weather is June-like, deliciously warm and bright; the trees are just in the tender green of the new buds, and the public gardens are thronged all day with thousands of the gay and idle, sitting under the trees in groups, laughing and amusing themselves, as if there was no plague in the air, though hundreds die every day. The churches are all hung in black; there is a constant succession of funerals, and you cross the biers and hand-barrows of the sick, hurrying to the hospitals, at every turn, in every quarter of the city. It is very hard to realize such things, and, it would seem, very hard even to treat them seriously. I was at a masque ball, at the *Theatre des Varietes*, a night or two since, at the celebration of the *Mi Careme*, or half-lent. There were some two thousand people, I should think, in fancy dresses, most of them grotesque and satirical, and the ball was kept up till seven in the morning, with all the extravagant gaiety, noise and fun, with which the French people manage such matters. There was a *cholera-waltz*, and a *cholera-galopade*, and one man, immensely tall, dressed as a personification of the *Cholera* itself, with skeleton armor, bloodshot eyes, and other horrible appurtenances of a walking pestilence. It was the burden of all the jokes, and all the cries of the hawkers, and all the conversation; and yet probably nineteen out of twenty of those present lived in the quarters most ravaged by the disease, and many of them had seen it face to face, and knew perfectly its deadly character!

As yet, with few exceptions, the higher classes of society have escaped. It seems to depend very much on the manner in which people live, and the poor have been struck in every quarter, often at the very next door to luxury. A friend told me this morning that the porter of a large and fashionable hotel in which he lived had been taken to the hospital; and there have been one or two cases in the airy quarter of St. Germain, in the same street with Mr. Cooper, and nearly opposite. Several physicians and medical students have died too, but the majority of these live with the narrowest economy, and in the parts of the city the most liable to impure effluvia. The balls go on still in the gay world, and I presume they *would* go on if there were only musicians enough left to make an orchestra, or fashionists to compose a quadrille. I was walking home very late from a party the night before last, with a captain in the English army. The gray of the morning was just stealing into the sky; and, after stopping a moment in the *Place Vendome*, to look at the column, stretching up apparently unto the very stars, we bade good morning, and parted. He had hardly left me, he said, when he heard a frightful scream from one of the houses in the *Rue St. Honoré*, and, thinking there might be some violence going on, he rang at the gate and entered, mounting the first staircase that presented. A woman had just opened a door, and fallen on the broad stair at the top, and was writhing in great agony. The people of the house collected immediately; but, the moment my friend pronounced the word cholera, there was a general dispersion, and he was left alone with the patient. He took her in his arms, and carried her to a coach-stand without assistance, and, driving to the *Hotel Dieu*, left her with the *Sœurs de Charité*. She has since died.

As if one plague was not enough, the city is still alive, in the distant fauxbourgs, with revolts. Last night, the *rappel* was beat all over the town, the national guard called to arms, and marched to the *Porte St. Denis*, and the different quarters where the mobs were collected.

Many suppose there is no cholera except such as is produced by poison, and the *Hotel Dieu* and the other hospitals are besieged daily by the infuriated mob, who swear vengeance against the government for all the mortality they witness.

I have just returned from a visit to the *Hotel Dieu*, the hospital for the cholera. Impelled by a powerful motive, which it is not now necessary to explain, I had previously made several attempts to gain admission in vain; but yesterday I fell in fortunately with an English physician, who told me I could pass with a doctor's diploma, which he offered to borrow for me of some medical friend.

It was like one of our loveliest mornings in June—an inspiring, sunny, balmy day, all softness and beauty—and we crossed the Tuileries by one of its superb avenues, and kept down the bank of the river to the island. With the errand on which we were bound in our minds, it was impossible not to be struck very forcibly with our own exquisite enjoyment of life. I am sure I never felt my veins fuller of the pleasure of health and motion, and I never saw a day when everything about me seemed better worth living for. The splendid palace of the Louvre, with its long *façade* of nearly half a mile, lay in the mellowest sunshine on our left; the lively river, covered with boats, and spanned with its magnificent and crowded bridges, on our right; the view of the island, with its massive old structures below, and the fine gray towers of the church of *Notre Dame* rising, dark and gloomy, in the distance, rendered it difficult to realize anything but life and pleasure. That under those very towers, which added so much to the beauty of the scene, there lay a thousand and more of poor wretches, dying of a plague, was a thought my mind could not retain a moment.

Half an hour's walk brought us to the *Place Notre Dame*, on one side of which, next this celebrated church, stands the hospital. My friend entered, leaving me to wait till he had found an acquaintance of whom he could borrow a diploma. A hearse was standing at the door of the church, and I went in for a moment. A few mourners, with the appearance of extreme poverty, were kneeling round a coffin at one of the side altars, and a solitary priest, with an attendant boy, was mumbling the prayers for the dead. As I came out, another hearse drove up, with a rough coffin, scantily covered with a pall, and followed by one poor old man. They hurried in, and I strolled around the square. Fifteen or twenty water-carriers were filling their buckets at the fountain opposite, singing and laughing, and at the same moment four different litters crossed towards the hospital, each with its two or three followers, women and children, friends or relatives of the sick, accompanying them to the door, where they parted from them, most probably forever. The litters were set down a moment before ascending the steps; the crowd pressed around and lifted the coarse curtains; farewells were exchanged, and the sick alone passed in. I did not see any great demonstration of feeling in the particular cases that were before me; but I can conceive, in the almost deadly certainty of this disease, that these hasty partings at the door of the hospital might often be scenes of unsurpassed suffering and distress.

I waited perhaps ten minutes more. In the whole time that I had been there, twelve litters, bearing the sick, had entered the *Hotel Dieu*. As I exhibited the borrowed diploma, the thirteenth arrived, and with it a young man, whose violent and uncontrolled grief worked so far on the soldier at the door, that he allowed him to pass. I followed the bearers to the ward, interested exceedingly to observe the first treatment and manner of reception. They wound slowly up the stone staircase to the upper story, and entered the female department—a long low room, containing nearly a hundred beds, placed in alleys scarce two feet from each other. Nearly all were occupied, and those which were empty my friend told me were vacated by deaths yesterday. They set down the litter by the side of a narrow cot, with coarse but clean sheets, and a *Sœur de Charité*, with a white cap, and a cross at her girdle, came and took off the canopy. A young woman, of apparently five and twenty, was beneath, absolutely convulsed with agony. Her eyes were started from the sockets, her mouth foamed, and her face was of a frightful, livid purple. I never saw so horrible a sight. She had been taken in perfect health only three hours before, but her features looked to me marked with a year of pain. The first attempt to lift her produced violent vomiting, and I thought she must die instantly. They covered her up in bed, and, leaving the man who came with her hanging over her with the moan of one deprived of his senses, they went to receive others, who were entering in the same manner. I inquired of my companion how soon she would be attended to. He said, "Possibly in an hour, as the physician was just commencing his rounds." An hour after this I passed the bed of this poor woman, and she had not yet been visited. Her husband answered my question with a choking voice and a flood of tears.

I passed down the ward, and found nineteen or twenty in the last agonies of death. They lay perfectly still, and seemed benumbed. I felt the limbs of several, and found them quite cold. The stomach only had a little warmth. Now and then a half groan escaped those who seemed the strongest; but, with the exception of the universally open mouth and upturned ghastly eye, there were no signs of much suffering. I found two, who must have been dead half an hour, undiscovered by the attendants. One of them was an old woman, nearly gray, with a very bad expression of face, who was perfectly cold—lips, limbs, body and all. The other was younger, and looked as if she had died in pain. Her eyes appeared as if they had been forced half out of the sockets, and her skin was of the most livid and deathly purple. The woman in the next bed told me she had died since the *Sœur de Charité* had been there. It is horrible to think how these poor creatures may suffer in the very midst of the provisions that are made professedly for their relief. I asked why a simple prescription of treatment might not be drawn up by the physicians, and administered by the numerous medical students who were in Paris, that as few as possible might suffer from delay:—"Because," said my companion, "the chief physicians must do everything *personally*, to study the complaint." And so, I verily believe, more human lives are sacrificed, in waiting for experiments, than ever will be saved by the results. My blood boiled from the beginning to the end of this melancholy visit.

I wandered about alone among the beds, till my heart was sick, and I could bear it no longer, and then rejoined my friend, who was in the train of one of the physicians, making the rounds. One would think a dying person should be treated with kindness. I never saw a rougher, or more heartless manner, than that of the celebrated Dr. ——, at the bedsides of these poor creatures. A harsh question, a rude pulling open of the mouth, to look at the tongue, a sentence or two of unsuppressed commands to the students, on the progress of the disease, and the train passes on. If discouragement and despair are not medicines, I should think the visits of such physicians were of little avail. The wretched sufferers turned away their heads after he had gone, in every instance that I saw, with an expression of visibly increased distress. Several of them refused to answer his questions altogether.

On reaching the bottom of the *Salle St. Monique*, one of the male wards, I heard loud voices and laughter. I had noticed much more groaning and complaining in passing among the men, and the horrible discordance struck me as something infernal. It proceeded from one of the sides to which the patients had been removed who were recovering. The most successful treatment has been found to be *punch*, very strong, with but little acid, and, being permitted to drink as much as they would, they had become partially intoxicated. It was a fiendish sight, positively. They were sitting up, and reaching from one bed to another; and, with their still pallid faces and blue lips, and the hospital dress of white, they looked like so many carousing corpses. I turned away from them in horror.

I was stopped in the door-way by a litter entering with a sick woman. They set her down in the main passage, between the beds, and left her a moment to find a place for her. She seemed to have an interval of pain, and rose up on one hand, and looked about her very earnestly. I followed the direction of her eyes, and could easily imagine her sensations. Twenty or thirty death-like faces were turned towards her from the different beds, and the groans of the dying and the distressed came from every side. She was without a friend whom she knew, sick of a mortal disease, and abandoned to the mercy of those whose kindness is mercenary and habitual, and of course without sympathy or feeling. Was it not enough alone, if she had been far less ill, to embitter the very fountains of life, and kill her with mere fright and horror? She sank down upon the litter again, and drew her shawl over her head. I had seen enough of suffering, and I left the place.

On reaching the lower staircase, my friend proposed to me to look into the *dead room*. We descended to a large, dark apartment, below the street level, lighted by a lamp fixed to the wall. Sixty or seventy bodies lay on the floor, some of them quite uncovered, and some wrapped in mats. I could not see distinctly enough by the dim light to judge of their discoloration. They appeared mostly old and emaciated.

I cannot describe the sensation of relief with which I breathed the free air once more. I had no fear of the cholera, but the suffering and misery I had seen oppressed and half smothered me. Every one who has walked through a hospital will remember how natural it is to subdue the breath, and close the nostrils to the smells of medicine and the close air. The fact, too, that the question of contagion is still disputed, though I fully believe the cholera *not* to be contagious, might have had some effect. My breast heaved, however, as if a weight had risen from my lungs, and I walked home, blessing God for health with undissembled gratitude.

SUCCESSFUL TREATMENT OF CHOLERA.

Mr. Earle has recently favored the profession with an account of sixty cases of cholera successfully treated by calomel and opium in small doses, accompanied by the application of very large sinapisms, and followed by purgatives. From his history of these cases, we should suppose most of them extremely mild, and therefore not decisive of the effects of the practice in such instances as are usually fatal. The following account is said by the London Medical Gazette, from which we extract it, to be from a source which entitles the facts and statements contained in it to implicit confidence.

The following circumstances, relative to the treatment of cholera in the prison at Cold Bath Fields, are of great importance :—

The first twelve cases occurred in the vagrant's ward, and the patients were attacked soon after some prisoners had been admitted from St. Giles's, and other infected districts. The first case that was reported as cholera occurred on the fifth of April. This man was suddenly attacked, and died after a very short illness, with all the symptoms of the prevailing epidemic.

When the first cases occurred, there were in all about twelve hundred persons in the prison ; but, up to the beginning of this month, they were not afflicted with bowel complaints, nor, in fact, with any other epidemic disease, being as healthy as they generally are at that season of the year.

The first four cases were treated in the common way, with brandy and opium, an ammoniated mixture, ginger, sinapisms to the region of the stomach, the hot-air bath, &c. &c., and all of them died after a short illness.

Since the 4th of April, up to this date (April 17), forty cases in all have been under treatment. Of this number, nineteen were admitted into the observation ward, with the premonitory symtoms of cholera. All of these had bowel complaints and suspicious ejections ; some of them complained of severe pain in the abdomen, sickness of the stomach, and in several cases these symptoms were attended with cramps, chiefly in the lower extremities. The whole of them were immediately treated by Mr. Wakefield with non-purgative saline remedies, recommended by Dr. Stevens, and in general they were convalescent in one, two, or three days, from the commencement of this practice. From this we may infer, that where the disease is attended to early, and *properly treated*, the state of collapse may be prevented in nineteen cases out of twenty.

We must state, however, that, as the numbers increased, it became necessary to dismiss those that appeared to be least ill, on purpose to make room for others. Of those that were dismissed as convalescent, two were re-admitted soon after in a state of collapse, and though every attempt was made to save them, yet they both died after a very short illness, with the symptoms of cholera in its most virulent form. With the exception, however, of the two that died, none of the cases (seventeen in number) were reported to the Central Board, partly, we believe, from a wish to avoid spreading alarm with respect to the prison, and partly because the disease was checked in the beginning; consequently, the patients had not *all* the symptoms of cholera, such as occur in the worst cases, or in the last stage.

In addition to the above seventeen which were not reported, there were twenty-one cases where the symytoms of cholera were very distinctly marked. Of this number, four of the early cases were treated in the common way, with diffusible stimuli, &c. &c., and all of them died after a short illness. These, with the two cases of relapse from the observation ward, make in all six deaths. Mr. Wakefield, however, having lost all faith in the common treatment, changed the practice; at the request of Dr. Stevens, the other fifteen cases were put under the saline treatment, and all of them recovered.

When the patients were first admitted, the following powder was immediately given, either in half a tumbler of tepid water, or occasionally in a little thin, clear, beef-tea :—

Supercarbonate of Soda, ʒss.
Muriate of Soda, ℈j.
Chlorate of Potass, grs. vii.

The above was given every hour, and continued until the patients were recovering from the state of collapse, after which it was diminished in frequency, in proportion as the re-action increased.

In all these cases, the outline of the practice was nearly the same, but in several instances the treatment was varied according to circumstances. When the stomach, for example, was extremely irritable, it was found that the carbonate of soda, given by itself, or the tartrate of soda, in a state of effervescence, were the most effective remedies that could be used, on purpose to allay the irritation, so as to enable the stomach to retain the stronger salts.

During the progress of the disease, an enema, with a large table-spoonful of muriate of soda, dissolved in warm water, was administered, with or without sugar, starch, &c., every three or four hours, at as high a temperature as the patients could well bear it. Sinapisms were also applied, as early as possible, to the region of the stomach, betwixt the shoulders, &c.; and, in the cold stage, frictions were also used with warm towels. Of the seventeen cases that were treated in this way, two died, (namely, the two patients who were re-admitted in a state of complete collapse,) making, in seventeen cases, two deaths and fifteen recoveries. But, including the whole of those that were under the saline treatment, the total amount is, in thirty-six cases, two deaths and thirty-four recoveries.

The cases in question were under the care of Mr. Wakefield, the medical attendant of the establishment, and during his absence they were attended to by Mr. J. Wm. Crooke, who kept notes of the cases, and saw that the medicines were properly administered. We may add, also, that Mr. Wakefield, with a degree of fairness which does him great credit, invited Dr. Stevens to attend along with him, to witness the effect of the saline treatment, which has here, we may say, for the first time, been fairly tried in this disease.

We can also state, that the cholera made its appearance about the same period amongst a small colony of Italians, who live in a narrow lane within a few hundred yards of the prison. Of these, eleven were attacked. The three first cases were treated by bleeding, brandy, and opium, all used at the same time, and they all died. The other eight cases were attended by Mr. Whitmore, a surgeon in the neighborhood, who, having witnessed the effects of the saline treatment in the prison, adopted it. All his patients speedily and completely recovered, except one, who, on the 13th, was so ill that he was not expected to live many hours; even he, however, is now in a state of convalescence. Thus there have been in all fifty-three cases, seven of which were treated in the common way, with diffusible stimuli, and out of this number seven died; while, of the forty-six that were under the saline treatment, there were two deaths and forty-four recoveries.

UNUSUAL DISLOCATION OF HIP JOINT.

Case of Unusual Dislocation of the Hip Joint. By Robert Keate, Surgeon.

I was called into the country, on the 13th February, to see a gentleman who had met with a severe accident, by his horse having fallen backwards with him and upon him, into a deep and narrow lane, where he had remained, as he supposes, for near a quarter of an hour before he was discovered, when he was nearly exhausted by pain and by fruitless exertions in calling aloud for aid. The horse was lying on its back upon him, with his heels struggling in the air; but the gentleman, who is strong and muscular, appears to have retained a firm hold of the bridle, and thus to have kept down the horse's head, and restrained, in some degree, the violent efforts of the animal.

He had been brought home, and was on his bed when I arrived. On examining the limb, I found it unusually elongated—at least from three to three inches and a half. The thigh was much flexed upon the pelvis—the leg as much bent on the thigh The whole limb was carried outward, or apart from the other, more than I had ever observed in any case of luxation. The knee and the foot were much everted—the trochanter extremely sunk, the soft parts being elevated in a circle around it. I found that the head of the femur was displaced, in a very unusual manner, to a situation inferior to the ischiatic notch, and I felt it lying close to, and on a level with, the tuberosity of the ischium, where it was capable of being freely moved under my fingers.

Without noticing the usual preparations for reducing a luxation, it will be sufficient to say, that in the first attempt the head of the bone was thrown into the foramen ovale. A second extension enabled me to place it *nearly* in its proper position in the acetabulum, but it could not be perfectly replaced ; and on gently moving it, and placing my ear on the trochanter, I felt and heard a distinct grating, as if of ruptured cartilage. By drawing the upper part of the femur outwards, (by means of a round towel thrown over my neck,) and pressing the knee sharply inwards, the head of the bone was replaced, with a snap, in the acetabulum ; but, even after this, I was able to elongate or pull down the limb, and it was evident to me that this was owing to a portion of the cartilaginous labrum having been broken off during the violence of the accident.

The gentleman was quite aware, and mentioned, after the first step, as I may call it, of the reduction into the foramen ovale, that the head of the bone was not properly replaced ; and he stated that the luxation had taken place by the same route, first into the thyroid foramen, and afterwards while struggling in the ditch—from thence downwards to the situation in which I found it. The case has proved very favorable ; but there was a severe injury at the same time to the knee, which threatens still to be troublesome.—*Medical Gazette.*

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ACTION OF EMETICS.

[Continued from p. 275.]

5. THE next general effect of artificial vomiting, which we shall notice, is that of producing diaphoresis, and a determination of blood to the cutaneous capillaries. The last effect is the more worthy of remark, since it is precisely the reverse of that produced by emetic substances when they fall short of causing actual vomiting. The effect of nausea is shown in the contraction of the extreme vessels, in the shrinking of the skin, and in the coldness and paleness of the surface. On the contrary, free vomiting increases cutaneous action, drives the blood into the capillaries, particularly those of the face, and brings on, in most cases, profuse perspiration. This difference, which is sufficiently remarkable, has been exaggerated by some authors who have made the comparison. Dr. Good, in an ingenious parallel which he draws between the effects of nausea and

vomiting, goes so far as to say, that, while the effect of the former is to depress all the vital powers, the latter tends as constantly to increase their energy. In this general form, the proposition seems to want distinctness and truth; for, were the vital powers actually prostrate, we could hardly, with any rational prospect of success, resort to emetics as a means of restoring them. A practice, founded on some principle like this, is resorted to under certain circumstances, and, as we apprehend, with very questionable benefit. Thus it is not uncommon to administer an emetic to persons under the influence of that peculiar exhaustion which arises from the use of cold water when the body is heated, and this not with the purpose of removing any offending cause, but with that of exciting some action in the system, and thus giving, as it were, a new impulse to the vital operations. What success may have attended this treatment in the hands of others, we know not; we have ourselves found it as useless in practice as it appeared to us unphilosophical in theory. The distinction, however, between the effect of nausea and that of actual vomiting, though perfectly obvious, is less important in practice than might at first seem; for the violent cutaneous action, of which we have spoken, is necessarily of short duration; and the diaphoresis, which is the more permanent, and therefore the more important, effect, may be maintained effectually by nauseant doses, when a state of active perspiration has once been excited by full and free vomiting.

6. Emetic substances, when followed by vomiting, obviously excite some specific action in the absorbent system, by which its activity is increased. Examples of this mode of action must be familiar to the observation of every practitioner. Effusions, whether serous or purulent, often rapidly and completely disappear under the influence of this mode of treatment. Hence the efficacy of emetics in dropsical cases, which will not unfrequently yield entirely to this single remedy. In fact, nature herself may be said to suggest this treatment, since dropsy has often been known to yield to spontaneous vomiting. Emetics have been administered, with repeated and singular success, in both hydrothorax and ascites; and in hydrocele, in consequence of the remarkable sympathy which exists between the scrotum and the stomach, and of which many other examples might be given, they are eminently useful. It is in consequence of the peculiar effect produced by vomiting on the absorbent system, that the matter of extensive abscesses sometimes returns into the circulation, and this without having created any external outlet. To the same principle must, in all probability, be referred the wonderful influence exerted by emetic substances over local inflammation. Of the long list of inflammatory diseases described by nosologists, not one can be mentioned which has not been known to be alleviated or cured under the influence of this remedy; and it is in the most formidable of these—in inflammations of the lungs, the pleura, and the bowels—that this influ-

ence has been most frequently and most successfully exerted. We say this is probably to be referred to an influence exerted on the absorbent system; but since, in many of the cases where this relief is afforded, there exists considerable alteration of structure, without actual effusion, the development of some other influence seems to be necessary, in order to account for the effect produced; and accordingly it is explained by many on the principle of a revulsion, or a metastasis of action, from the affected organ to the skin; and this view of the subject is equally in accordance with the laws of pathology.

7. Another remarkable effect of vomiting, on the system, is its antispasmodic influence. There is no remedy which so constantly presents itself to the mind of the practitioner in cases of convulsion, and none, probably, which is so often employed with success. One reason for this, no doubt, is, that the affection of the nervous system so often arises from sympathy with a disordered state of stomach, and that the emetic, by removing the cause, also removes the effect. But in many cases, where this cause is not present, the good effects of emetics in unbending, as it were, the spastic action, do not fail to manifest themselves. In these cases, the relaxing influence of the preceding nausea contributes greatly to the general effect. Indeed, it is often curious to observe how, under this influence, the muscles of the face, chest, abdomen, and extremities, which had just before been strained up with every variety of contortion, are subdued into total inaction by the penetrating agent thus diffused through the system. In fine, nothing is more unequivocal than the antispasmodic influence exerted by this remedy under these circumstances. Whether the system, in this case, is affected by sympathy with a vital organ, or whether the influence, like that exerted over inflammation, is to be referred to a transfer of action, it is not easy to decide, or very important to determine. No simpler expression need be sought of the principle, since none is better suited to express the phenomena.

8. We have not adverted to the effect of emetics in simple fever, because this appears to us somewhat distinct from its other modes of operating, and therefore deserving of a separate consideration. This effect is so familiar, and so unequivocal, as to form the foundation of one of the most constant rules in practice; and the administration of an emetic, in simple fever, is almost as much a matter of course, as if the disease consisted in the presence of some foreign matter in the stomach, which it was necessary to dislodge. In view of the striking influence exerted by emetics in this disease, those who have attempted to assign to its proximate cause a local habitation, have nearly agreed in fixing its seat in the stomach or in the liver. By others, again, who adopt the Cullenian or spasmodic theory of fever, the effect of emetics in these cases is referred to its diaphoretic influence; and, taken in connection with this theory,

the explanation is sufficiently satisfactory. But, so long as the nature of fever continues to be a subject of dispute, it is obvious that the mode of operation of the remedy must partake of this uncertainty.

FOXGLOVE IN THE CURE OF CONSUMPTION.

Every physician knows that the same medicine produces very different, and often opposite, effects on the system, in large and small doses. Opium is a familiar example; ipecac. is another—in small doses being tonic, and emetic in large. Mercurials, too, are subject to the same remark, and it is to very recent observation we owe the knowledge of the fact, that the peculiar alterative effect of this article, and its greatest degree of influence over chronic disease, is obtained by the frequent administration of minute doses, from one eighth to one half a grain of blue pill, three or four times a day. By this mode of prescription, the celebrated Dr. Wilson Philip has been enabled to command severe diseases of the stomach, liver, brain, and other organs, which had been of long standing, and resisted the remedy in larger doses; he has been enabled thus to produce salivation in persons to whom larger doses had been given for a long time without affecting the salivary glands or the complaint for which it was prescribed.

An Irish surgeon has recently come out in defence of an old remedy in pulmonary consumption—the *digitalis purpurea.* He has ascertained, by patient trials, that foxglove, given in minute doses, and combined with the spirit of lavender, is capable of producing the following effects, in the cases of consumption, without the least disagreeable sensation in the stomach or any other organ:—

1, increased action of the kidneys;—2, reduction of the pulse;—3, absorption from the lungs;—4, mitigation and removal of cough;—5, improvement of appetite;—6, cessation of night sweats;—7, restoration of health. The combination with lavender prevents the inconvenience sometimes produced by the digitalis alone on the stomach and nervous system.

In those advanced stages of phthisis that are accompanied by colliquative diarrhœa and aphthæ, this remedy has not been tried by Dr. Wood; but he supposes, from his experience with it given in the foregoing manner, that it is capable of affording relief at as late, and perhaps a later period, than any other article in the materia medica.

HYSTERICAL AFFECTIONS OF THE KNEE.

The obstinacy with which many painful affections of the knee and other joints withstand treatment, after the primary inflammation has been subdued by blistering and general depletion, has led to the belief that they may, in some cases at least, assume at such period a nervous character. On this supposition an English surgeon has tried, in a case reported in the Lancet, the efficacy of valerian, and found it eminently successful. The prescription was that of Sir Henry Halford—an infusion made by pouring boiling decoction of bark on the powdered root of valerian. Of this infusion ℥xi. mixed with ʒj. of the ammoniated tincture was administered to the abovementioned patient three times a-day.

MASSACHUSETTS MEDICAL SOCIETY.

The annual meeting of this large and most respectable society was held on Wednesday, the 6th instant, at the society's rooms at the Athenæum. The annual reports of the several officers, and of select committees, were read and accepted, and the affairs of the society appeared to be in a flourishing state. A memorial was received and read, from the Berkshire District Society, requesting such modification of the principles of the society, as shall ensure to the members, residing at a distance from Boston, more immediate benefit from the portion they contribute to the funds of the society. This memorial was referred to the Counsellors, who, it is to be hoped, will adopt some measures, if not to meet the demands of the gentlemen from Berkshire, at least to render the funds of the society more directly useful, if possible, to the distant members, and to remove any suspicions which may be entertained of an unjustifiable and impolitic monopoly of the honors or advantages of this ancient institution. The following gentlemen were chosen Counsellors for the ensuing year :—

For Suffolk—Drs. William Ingalls, John Dixwell, James Jackson, Benj. Shurtleff, John C. Warren, John Randall, Geo. C. Shattuck, John B. Brown, Walter Channing, Jacob Bigelow, George Hayward, Enoch Hale, jr., Solomon D. Townsend, John Ware, Zabdiel B. Adams, David Osgood, Edward Reynolds, John Homans.

For Essex—Drs. Richard Hazeltine, Abel L. Pierson, Andrew Nichols, Thomas Manning, Samuel Johnson, Joseph Kittredge, Jeremiah Spofford, Richard S. Spofford, E. L. Coffin, Calvin Briggs, J. G. Johnson.

For Middlesex—Drs. A. R. Thompson, Amos Bancroft, Calvin Thomas, Rufus Wyman, Thomas Bucklin, John Walton, Zadock Howe, William J. Walker, Timothy Wellington, J. C. Dalton, Ephraim Buck, J. Bartlett.

For Worcester—Drs. Stephen Bachelder, jr., John Green, Charles W. Wilder, Benj. F. Heywood, Edward Flint, Amos Parker, Geo. Willard, J. Stone.

For Hampshire—Drs. Joseph H. Flint, Alpheus F. Stone, Stephen W. Williams, Levi W. Humphreys, Job Clarke, Elisha Mather.

For Berkshire—Drs. Henry H. Childs, Robert Worthington, Wm. H. Tyler, Asa G. Welch, Alfred Perry, Hubbard Bartlett, R. Fowler.

For Norfolk—Drs. Amos Holbrook, Nathaniel Miller, John Bartlett, Robert Thaxter, Samuel Bugbee, Jeremy Stimson, Ebenezer Alden.

For Plymouth—Drs. Nathan Hayward, Hector Orr, Cushing Otis, Ezekiel Thaxter, Paul S. Nichols, N. Whitman.

For Bristol—Drs. Alexander Reed, A. Mackie, W. Witridge.

For Barnstable—Drs. Joseph Sampson, Aaron Cornish.

At a meeting of the Counsellors on Thursday, Dr. Bigelow, of Boston, was chosen to deliver the next annual address, and the following officers were chosen for the year :—

J. C. Warren, M.D., *President.*—J. Dixwell, M.D., *Vice President.*—G. Hayward, M.D., *Corresponding Secretary.*—E. Hale, jr., M.D., *Recording Secretary.*—W. Channing, M.D., *Treasurer.*—D. Osgood, M.D., Librarian.

CENSORS.

For the First District, and for the Society—Drs. Walter Channing, Geo. Hayward, Enoch Hale, jr., John Homans, W. J. Walker.

For the Second District—Drs. John Green, Benj. F. Heywood, Edward Flint, Charles W. Wilder, Gustavus D. Peck.

For the Third District—Drs. Joseph H. Flint, Elisha Mather, Atherton Clarke, Edward Dickinson, David Bemis.

For the Fourth District—Drs. Alfred Perry, William H. Tyler, Orren Wright, Robert Worthington, Asa G. Welch.

Papers on the Spotted Fever.—A correspondent desires a list of the papers on Spotted Fever, published in the early numbers of the New England Medical Journal. We give below a reference to all the articles that have appeared in that periodical on the subject in question :—

Vol. I., p. 151, A Letter from a Gentleman in Maine—207, A Short Notice of the Spotted Fever—228, Some Cases of Spotted Fever.—Vol. III., p. 166, Account of the Disease in Maine.

All the above are anonymous. Besides these, there appeared, in Vol. IV., p. 238, some remarks on this disease by Dr. Hazeltine, and in Vol. XIII., p. 23, a number of cases by Dr. Greene.

Whole number of deaths in Boston for the week ending June 8, 31. Males, 16—Females, 15.

Of convulsions, 1—measles, 4—unknown, 2—worms, 1—drowned, 1—infantile, 1—violence, 1—intemperance, 1—scarlet fever, 2—croup, 3—dropsy, 1—throat distemper, 1—old age, 2—consumption, 2—lung fever, 2—cancer in stomach, 1—epilepsy, 1—inflammation on the brain, 1—paralysis, 1—marasmus, 1—water on the brain, 1.

ADVERTISEMENTS.

PAXTON'S ANATOMY.

This day published by CARTER & HENDEE, corner of Washington and School Streets—An Introduction to the Study of Human Anatomy. By JAMES PAXTON, Member of the Royal College of Surgeons, &c. &c., with Illustrations. First American Edition, with additions, by WINSLOW LEWIS, jr. M.D. Demonstrator of Anatomy to the Medical Department of Harvard University. June 4.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

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THE

BOSTON MEDICAL AND SURGICAL

JOURNAL.

VOL. VI.] WEDNESDAY, JUNE 20, 1832. [NO. 19.

ACUTE AND CHRONIC LARYNGITIS.

Cases of Acute and Chronic Laryngitis. By M. Cruveilhier.

M. Cruveilhier divides the diseases of the larynx into those which occur above the glottis, those below it, and those which attack the glottis itself. Of all the laryngeal affections, inflammation, as might à priori be conceived, is the most frequent, and, whether acute or chronic, it either attacks the cellular tissue external to the mucous membrane, or the mucous membrane itself.

Case 1. *Inflammation of the Cellular Tissue above the Glottis—Œdema of the Glottis.*

Pierre Vrain, æt. 56, an old soldier, and addicted to drinking, was seized, on the 26th April, with lassitude, and next morning complained of sore throat and pains in the limbs, with fever. On the third day, the soreness of the throat was great, deglutition and articulation difficult, and the velum palati was seen red and swollen. (*V. S. ad* ℥x. *Ros. c. Acid Hydrochlor*). In the evening, the breathing was very difficult, sibilous, with threatening of suffocation ; the voice only heard at intervals, hoarse and croupy ; the velum more red and swollen, the isthmus appearing almost closed. (*Hirud.* xxx. *gutt.*) After this the patient experienced great relief, and on the fourth morning the soreness of the throat and dyspnœa were gone. Three white patches were observed on the posterior arch, but the redness and swelling had almost disappeared. In the evening, all the bad symptoms returned, and delirium supervened. On the fifth day, the breathing was very difficult and noisy—the pulse almost imperceptible ; at noon he died.

Sectio Cadaveris. The two folds of mucous membrane forming the sides of the superior orifice of the larynx, that situated posteriorly at the sides, in the neighboring part of the pharynx, the base of the tongue, on the anterior surface and superior border of the epiglottis, were all of whitish color, and infiltrated as it were with pus ; the two mucous folds already alluded to, especially the left, were enormously swollen, projecting towards each other, so as to be in approximation everywhere, excepting for a small space behind, where a small aperture only remained for the passage of air. The glottis, and the portion of the larynx below it, were more natural. On cutting through the parts affected, the pus was found to be diffused in the cells of the cellular texture, and not collected into any distinct abscess. The mucous membrane itself appeared soaked with pus, and its vessels were only detected here and there. Already several sloughs were completely or incompletely detached, and small blood-vessels, injected, marked their boundaries in a distinct manner. The tonsils were sound, the anterior surface of the epiglottis was covered with sloughs, and its inferior part, tumid and enlarged, contributed to contract the opening of the glottis. A representation of the larynx of the patient accompanies the case, and displays, in a marked manner, the almost complete obstruction of the air-passage, by the infiltration of the pus in the loose cellular tissue external to the mucous membrane.

M. Cruveilhier makes some judicious reflections on the foregoing case, which is more important in its character, and more worthy of study in its details, than a superficial reader or practitioner might possibly suspect. It is important, because it is one of a class not very unfrequent, and equaled in insidiousness only by its fatality; it deserves consideration, because it displays a common professional mistake—that of considering a patient as out of danger, or in little danger, when, in point of fact, his existence is in peril. We have seen several instances of the same description, and we speak from personal experience and observation. But we shall notice an observation or two of M. Cruveilhier's. He looks upon the affection as one of diffuse inflammation of the cellular texture external to the mucous membrane of the larynx. Of this there can be no question. He considers that there exists a great analogy between it and the angina œdematosa. They are similar in their seat, but not altogether in their nature; for in one the cellular membrane is infiltrated with serum—in the other with pus. But on the surface of the body we constantly witness the effusion of serum preceding that of pus or lymph in the subcutaneous and in the inter-muscular cellular membrane, and it is possible that a similar course may be observed in these anginæ. We do not look on the point as determined, for reasons into which we cannot enter at present. If, says our author, a membrane which is attacked with inflammation is firmly attached on one side and free on the other, the inflammatory effusions are thrown out on its free surface; but, if loosely connected to other parts by the cellular tissue, effusions are apt to take place in the latter, and, he might have added, to be diffused in it to a great and a fatal extent. Thus we have seen, in examples of fatal cynanche, an effusion of lymph and pus commence in the cellular membrane external to the mucous membrane of the pharynx and larynx, and spread thence between the œsophagus and spine as low as the diaphragm, between the œsophagus and larynx, and between the larynx and its muscles throughout the front of the neck. Those who have bestowed much attention on the affections of the cellular membrane will experience no surprise at this.

With respect to symptoms, we can say little more than that they are those of acute cynanche, and that they are often more deceptive. We should say, however, that there is often a degree of anxiety of aspect, and appearance of something wrong, disproportionate to the obvious mischief. M. Cruveilhier insists very properly on careful examination of the throat, internally and externally. We should endeavor to obtain a view of the epiglottis if possible, and frequently we may do so by patience and gentleness. Its condition of redness, paleness, or tumefaction, is an index of the state of the larynx above the glottis. Dr. Thulier, of Limoges, has recommended examination of the part by the finger; but, supposing that accurate information were thereby obtained, patients will seldom be found to submit to this manual inspection in this complaint. In chronic diseases of the larynx, M. C. allows, and we agree with him, that this mode of investigation is extremely useful, and we know that it is practicable.

The treatment recommended by M. Cruveilhier is active and judicious:—a copious bleeding in the first instance, leeches, emetics. To this he should have added the inhalation of vapor, and the administration of calomel with active purgatives. But this will not suit all cases, and when the disease attacks the aged or the debilitated, which it too frequently does, the cautious practitioner will hesitate before he employs very violent measures. In such, calomel and opium, with sudorifics, purgatives, leeches, and local steaming, must be chiefly relied on.

Case 2. *Inflammation of the Cellular Membrane of the Larynx below the Glottis—Death from Suffocation.*

A young Swiss was received into the Maison Royale de Santé, under M. Duméril, with pneumonia. He was convalescent from this, when he complained of a violent pain in the region of the larynx, though examination of the fauces, and of the region above and below the os hyoides, elicited nothing unnatural. Dyspnœa and great difficulty of articulation soon succeeded, with paroxysms of suffocation, in which the voice, respiration, and cough, were croupy. He died on the fifth day from the commencement of the symptoms.

Sectio Cadaveris. The larynx, examined from behind, presented a projection at the level of the cricoid cartilage, which, when exposed, was found denuded, perforated, and reduced to a very thin lamina, surrounded with pus, which was contained between it and the thickened mucous membrane. There was no trace of perichondrium. The arytenoid cartilages, surrounded with condensed cellular and mucous membrane, were no longer articulated to the cricoid, disorganized as it was. The laryngeal muscles were all infiltrated, but with what we are not informed. The disorganization of the cricoid cartilage extended to its sides, especially to the left.

M. Cruveilhier observes, that the death of the patient from suffocation is readily explained, by the projection, internally as well as externally, of the thickened mucous membrane and perichondrium detached from the cartilage. M. Cruveilhier also believes that the case was essentially one of inflammation of the cellular membrane external to the mucous. In support of the opinion, he cites the following case:—

Case. A young man, convalescent from typhus, was suddenly seized with hoarseness of the voice, unattended with difficulty of breathing. Eight days after the invasion of the symptoms, he died without any paroxysms of suffocation, and apparently from obstruction of the air-passages. On examination, a collection of matter was found in the substance of the right mucous fold forming the superior aperture of the larynx. The arytenoid cartilage, deprived of its perichondrium, was bathed in the pus. M. Cruveilhier also adverts to another case, published by M. Bouilland in the Journal Complementaire, 1825, tome 19.

Case. A man, æt. 22, had been in the Maison de Santé for two months, on account of a putrid fever. Eight days after leaving the establishment, he presented himself at the Cochin Hospital in the following condition:—there was extreme hoarseness, which had existed for a month, harsh cough, with great soreness of throat, and threatening of suffocation on the slightest exertion. Next evening, the restlessness was such, that the patient could not remain in his bed; the respirations were deep, prolonged, and frequent, accompanied with a rough sound, like that of a bass-viol, and the patient was in a paroxysm of terror and suffocation, with a pulse scarcely to be felt. The patient was rather better during the night, but the symptoms returned next day. On the fourth day he had a paroxysm of dyspnœa, almost amounting to suffocation, and in the night he died.

Sectio Cadaveris. On the posterior part and sides of the larynx was an abscess capable of containing a filbert. The cricoid cartilage was denuded, as though dissected, and the abscess almost surrounded it. The crico-arytenoid muscles were bare, of greenish color, and thickened; the nerves could not be traced. The articulations of the arytenoid cartilages with the cricoid were entirely destroyed.

Case 5. *Chronic Ulceration of the Larynx, and partial Destruction of the Epiglottis—Death by Suffocation.*

A man, æt. 40, applied at the Maison Royale de Santé, with all the symptoms of phthisis laryngea; deglutition was extremely difficult, almost always followed by long and severe cough, sometimes even by threatening of suffocation. On examination, M. Cruveilhier discovered thickening of the uvula, velum, and soft palate, with ulceration of the borders and anterior surface of the epiglottis. He had had cough and hoarseness for eight or ten months, but had only ceased to work for fifteen days. He died suddenly.

Sectio Cadaveris. The uvula was furred and thickened ; the posterior arch of the palate thickened also ; the epiglottis ulcerated and festooned in appearance at its circumference ; the superior orifice of the larynx, and the mucous membrane covering its posterior surface, thickened, ulcerated, and granulated. The whole interior of the larynx presented the same thickening and granulated appearance ; the base of the right arytenoid cartilage was denuded, ulcerated, and partially ossified. The lymphatic glands at the sides of the larynx were indurated and infiltrated with tuberculous matter. The lungs were closely adherent to the thoracic parietes, and crowded with miliary tubercles ; in the summit of the right lung was a large cavity, perfectly cicatrized on its internal surface.

M. Cruveilhier observes, that he has witnessed sufficient cases to enable him to pronounce with confidence on the existence of phthisis laryngea, as a distinct disease. It is much more frequent, notwithstanding, in combination with tubercular disease in the lungs; in fact, we should say, from what we have seen of cadaveric investigations, that a very large proportion of phthisical patients present small laryngeal, or, at all events, tracheal, ulcerations previous to death. Here we must conclude these cases; and, although there is no fact absolutely new to be found amongst them, no doctrine of novel application to be drawn from them, no peculiar or successful plan of treatment advocated or even hinted at—still we think that their importance is sufficient to merit the attention of practical men. The insidious character and too fatal nature of these affections of the larynx cannot be too forcibly, too clearly, or too often pointed out; for many a man has in some degree lost his professional character by attaching too light importance to diseases of this description.—*Medico-Chirurgical Journal.*

CASES OF DROPSY.

Dropsy treated with Elaterium, &c., in Middlesex Hospital. By Dr. Wilson.

Case 1. Lydia Ellis, aged 29, married, admitted 13th December. Ill three months with pain of chest and general swelling: had her second child 22d January last, but the swelling did not begin till the last three months, at which time a hardness was felt in the right inguinal region; pulse small and very frequent; tongue furred; bowels open; urine scanty, high colored, acid, not albuminous; orthopnœa; fluctuation perceptible in the abdomen.—Ext. Hyoscyami, gr. v. omni nocte. Decoct. Spartii co., Inf. Digitalis, equal parts, with Spir. Æth. Nitrici, ʒi. three times a day; to which was afterwards added, Potassæ Acet. ℈i.

Dec. 19th. Omit med. One grain of Elaterium dissolved in ʒiv. Spir. Æth. Nitrici; ʒi. of which to be taken every second hour, till the bowels are opened freely.

21st. Repeat Ext. Elaterium.

23d. Imperial drink.

24th. Increase the Ext. Elaterium to half-grain dose, in Spir. Æth. Nit., and to be repeated three times if necessary.

28th. Repeat Elaterium as before.

30th. Neither diuretics nor elaterium have produced any sensible diminution of the swelling: she seems much the same as when she came in.—Fiat paracentesis abdominis.

January 2d. Three gallons of very clear water were drawn off.

4th. Extracti Elaterii, gr. one-third, formâ pilulæ, secundis horis, ad tertiam vicem, si opus sit.

5th. Ext. Colocynth. co. gr. x. statim.

6th. Olei Crotonis Tiglii ♏ i. formâ pilulæ, et enema commune statim. Repet. Ol. Crot. ♏ i.

7th. Bowels freely open this morning, for the first time since she was tapped: greatly relieved; pulse 100.—Potassæ Hydriod. ʒss. ex Aquæ ter die. Gin, ʒiij. daily. Ext. Colocynth. comp. gr. x. statim.

10th. Vomiting severe.—Omit med. Acidi Hydrocyanici m ij. tertiis horis, ad tertiam vicem.

11th. Ext. Colocynth. co. gr. x. statim, et. rep. si opus sit.

13th. Olei Crotonis Tiglii m i.

14th. Repet. Ol. Crot. m i.

16th. Severe vomiting still continues; evacuations rare, and very scanty; has vomited several times stercoraceous matter, and relieved by it.—Olei Crotonis m i. formâ pilulæ, et repet. sextis horis, ad tertiam vicem, si opus sit. Enema Decocti Avenæ cum Olei Terebinthinæ, ℥vj. octavis horis repetendum. Linimentum Saponis comp. abdomini intricatum.

17th. Vomiting absent the last thirty-six hours; has had two scanty solid motions this morning.—Repet. Ol. Crot. m i. ter die formâ pilulæ.

18th. Has had two free evacuations this morning, in appearance natural; no sickness; much relieved.—Repet. Ol. Crot. m i. cras mane, et Enema bis die.

19th. A slight motion last night and this morning; appetite improved; no pain, except in making water, which is very scanty.

20th. Had a copious solid motion last night; vomiting returned this morning.—Repet. Pil. et Enema bis die.

21st. Vomiting continued all yesterday, ceased to-day; bowels not opened. At night felt much fatigued; took her gin; soon after vomited, and shortly afterwards expired.

No post-mortem examination was allowed. From the dropsy being almost entirely confined to the abdomen, and a swelling first perceived in the right inguinal region, and as, after paracentesis, the right region was more full than the left, and neither diuretics nor purgatives had produced any sensible effects, it was supposed that the dropsy was ovarian. After being tapped, the hydriodate of potass was given as a diuretic; but, from the almost constant sickness before and afterwards, and the great difficulty now of stimulating the bowels to action, it was soon abandoned; and, to effect the latter object, powerful means were had recourse to. The matter vomited at different times, about the 16th January, was certainly stercoraceous, as far as the evidence of sight and smell could be trusted; and sometimes the quantity vomited was very considerable.

Case 2. A female, single, aged thirty-five, admitted 3d of February: confined eight months ago, and has been ill nearly ever since; weaned child three months since. Two months ago, head and face began to swell; a month after, swelling of abdomen commenced; and, a week after that, legs began to swell. At present, swellings of face and abdomen much subsided, but legs and thighs very much swollen, and skin in some parts red; pulse full.—To be bled to ℥xvj. One third of a grain of Ext. Elaterium, made into a pill, to be taken next morning, and to be repeated every second hour for three times, should the bowels not act.

Feb. 4th. Purged and vomited by the first dose, which was not repeated.—To have one third of a grain of Elaterium only, once every second day.

8th. Dejections have been copious and liquid, but complains of much sickness and distress, caused by medicine ; says her bowels are easily acted on, and begs for a less dose of medicine.—To have a quarter of a grain of Ext. Elaterium every second day.

13th. Has continued to have copious fluid motions ; œdema of legs much less ; catamenia have appeared, and very profuse.—Omit med. To have Potassæ Hydriodatis, ℈i. ex Aquâ, ter quotidie.

For the first two days after taking the above, the quantity of urine was not increased ; but on the third day the quantity very much increased, and continued so till the swellings entirely disappeared ; and the same treatment was pursued till the 27th, when she left the hospital.

Case 3. John M'Cay, age 21, ill six months. His feet had always perspired greatly, till one day he put them in cold water, since which perspiration has ceased, and the feet, ankles, and face, became swollen, and have continued so ever since. Now the legs, thighs, penis, and scrotum, are greatly swollen ; abdomen slightly, face more so ; bowels costive ; urine scanty ; pulse 90, and full.—Venæsectio ad ℥xx. Ext. Elaterii, gr. one-fourth ; Spir. Æth. Nitrici, ʒi., ex Aquâ, to be repeated every second hour for three times, if not purged, and the same quantity to be taken every other day.

28th. Frequently vomits after medicine, but still a sufficient quantity remains to purge him. Legs and abdomen less.—To take same quantity of Elaterium made into pills.

Jan. 2d. The doses to be increased to one-third of a grain.

7th. Swellings of face, abdomen, and inferior extremities, much diminished.

18th. Has been purged every other day by Elaterium ; swellings almost gone.

He continued the same medicine till the 27th, after which no more Elaterium was given, as he had then a sharp attack of bronchitis, for which he was twice blistered, and once took ten grains of calomel ; for some days he took Mist. Amygdalæ, ℥iss. ; Potas. Nitratis, gr. x. ; Vini Antim. Tartarisati, m xx. ter die.

Feb. 6th. Much pain in the loins, with hæmaturia.—To be cupped on loins to ten ounces.

8th. Pains of loins almost gone ; no hæmaturia.

Afterwards his bowels were merely regulated, and half an ounce of castor oil was generally sufficient for that purpose.

20th. Went out well.

Although the disease, in the two last cases, had been of some standing previous to the admission of the patients, they were considered as examples of inflammatory dropsy, and in both these instances bleeding was had recourse to. It may be observed, that one quarter of a grain of Elaterium produced a more purgative effect on the woman than one grain did on the man. In the use of this medicine great caution is required, and the doses should at first be small ; for, in addition to the difference of susceptibility to its action in different constitutions, the preparation itself varies very greatly in strength.—*Medical and Physical Journal.*

CHOLERA.

Remarks on the External Application of Opium in Cholera. By Dr. Bow.

Without attempting even to guess at the mode by which nervous influence is re-produced after expenditure, it is certain that there is no reservoir of dormant influence from which an organ can be supplied when its function is immoderately exercised. It is supplied, then, at the expense of other organs; or, if the function of any organ be exercised less actively than usual, then other organs receive an increased supply of nervous influence, and their functions therefore become proportionably more active. The above is meant as introductory to a few remarks on cholera.

In my work on fever, I profess to be one who believes that the office of the great sympathetic nerve is to effect involuntary motion, and the chemical processes which go on in the system; and I believe with many, and in particular with Mr. G. H. Bell, that to a failure in power in the sympathetic system of nerves, "is to be ascribed the disease which has obtained the name of Cholera Asphyxia," and also with him, that "the great object in the cure of the disease is to stimulate the sympathetic system of nerves." But there is only one way by which this system of nerves can effectually be stimulated: of this hereafter. If the functions of the sympathetic nerve be suspended or less actively exercised, where is the proof that the functions of other organs are being exercised more effectually? It is to be found in the fact, that the mental faculties remain unimpaired, although black blood is circulating, or perhaps rather stagnating, in the brain. It is to be found in the fact, that the skin and stomach acquire a morbid sensibility, sometimes to a painful degree, and in the tonic spasms of the muscles. In a healthy state of the body, we may divert nervous influence from the sympathetic system to the surface of the body, by stimulating the extremities of the sentient nerves by blisters, sinapisms, and other irritating applications; but these are applied, in the disease before us, with the view of producing an opposite effect! Diminish the sensibility of the surface rather than increase it, and we shall then arrive at the true mode of stimulating the sympathetic system. Wash the patient with laudanum, and observe the effect.

Before the cholera appeared in Sunderland, I attended a case of common cholera; for, although it was the worst case I had till then seen, I did not think of discovering any resemblance to the Asiatic. All the common remedies failed to check the vomiting, purging, and cramps; but I at once succeeded with the strong opiate liniment, the formula for which I subjoin.*

A report of this case I forwarded to one of the medical gentlemen sent by government to Sunderland; but, as he took no notice of my letter, I presume he did not receive it, although the dead-letter office has not noticed it either.

The following is a case in which the good effects almost immediately followed the application, and the only other where I have had an opportunity of trying the plan fairly :—

---

* R. Opii, one ounce; Liniment. Camph. c. one ounce. Digere per dies aliquot et effunde linimentum.

Mrs. D., aged 26, the mother of three children (the youngest sixteen months old, still at the breast), was attacked, at three in the morning, with vomiting and purging. I saw her at five ; she then complained of great thirst, great weakness, and severe cramp in the great toes ; there was lividity under the eyes, and coldness of the feet and hands, although she did not complain of it ; pulse 104, and feeble ; the tongue appeared bloodless, but not very cold. I saw neither the dejections nor the matter vomited.—Colomel, opium, &c.

At half-past eight o'clock the symptoms were alarming. The cramps had extended to the knees ; she could not move out of bed, and there the stools were passed ; the medicine was rejected from the stomach, and the matter vomited had the appearance of thin gruel. The dejections I did not see, but was told afterwards there appeared nothing but water. The smell of the bed was exactly that which I perceived at Newburn. The pulse was barely perceptible ; the lividity under the eyes greatly increased, and the thirst intolerable ; the voice weak.—I ordered rather more than half an ounce of the liniment to be rubbed on the bowels and spine ; two grains of calomel.

At ten o'clock I found her lying on her side, with her knees drawn up ; she had neither vomited nor purged since the liniment was applied ; the tongue had lost its paleness ; color had returned to the cheeks, and there was a glow of heat all over the body. She said she was perfectly relieved, excepting that when she moved the cramp returned to the toes.

At eleven o'clock I found her in a fast sleep. Whilst I endeavored to feel the pulse she awoke, and said she was perfectly happy. Next day she was able to attend to the business of the house.

When at Newcastle, in January last, I mentioned to Mr. Howey what I conceived to be the nature of the disease, and also the benefit which I expected would result from opiate frictions : upon which he noticed a case where the cure was attributed to the accidental application of two ounces of laudanum. Mr. H. did not himself attend the patient, but he was kind enough to procure for me the following, which is an extract from his letter :—

"The case in which the two ounces of laudanum were rubbed upon the bowels, was that of a man named Killbreath, at Dent's Hole, and occurred before I came to this neighborhood. It appears that Mr. F. found him in the evening rapidly approaching the stage of collapse ; the pulse was extremely weak and thready ; hands cold, and rather blue ; severe cramps in the legs, with vomiting and purging, the fluid evacuated resembling milk and water. About three pints of warm water were immediately given, followed by an enema of gruel, containing Spt. Ammoniæ. The bowels having been completely emptied by these means, a draught, containing Tinct. Opii, gtt. xxiv., was given, and half an ounce directed to be rubbed upon the abdomen ; but, by mistake, two ounces were used in that manner. Next morning the man had completely rallied, having passed a comfortable night, without any recurrence of the vomiting."

Dr. Cragie says, that in the choleric collapse the heart's action is certainly augmented in force, as if to overcome an obstacle; and, if it succeeds in this, the disease is cured. I have no doubt but that the heart's action is augmented in force, for some time after collapse takes place, compared to what its force was in the previous stage; and I have as little doubt but that we have it in our power, in the majority of cases, to enable it to overcome the obstacle, by a plentiful application of opium, belladonna, or the like, externally.—*Ib.*

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, JUNE 20, 1832.

THE CHOLERA AT PARIS.

Few sayings are more wise than that when a point is in dispute, we should *act* on the safest side. Our brethren in Paris have erred, we apprehend, in disregarding this rule. If anything can be said to be in dispute, it is the question respecting the contagiousness of the cholera. Yet, on the arrival of the disease in Paris, it was officially proclaimed to be incapable of communication from the sick to the healthy, and the wards of the hospitals, in which the cholera patients were placed, were thrown open to the public. This measure, and its natural consequences on the arrangements of the great mass of the people, may be fairly presumed to be one reason why so many have fallen victims to the disease in so short a time, and why it should have attacked an unusual number of those who occupy prominent places in society. It is said, and with some degree of truth, no doubt, that the cholera cannot manage frames built out of beef and porter, so well as those made up of salad, wine, and soup meagre. But there is a manifest reasonableness in the belief that the devastation produced by the disease among the French, was spread more widely and indiscriminately by the general exposure of all classes to the persons of the sick. In other countries, where the idea of contagion has been before the people, a measure of precaution has been adopted, not only by governments, but by families and individuals. The most affluent and intelligent persons in those countries have thus avoided at least one source of danger. But the members of our profession have been necessarily called to disregard these considerations, and it is among physicians alone, in the higher classes, that the disease has broken out and proved fatal. Not so in Paris. Curiosity, policy, or a sense of security (from the ill-timed and ill-judged bulletin of the faculty), led great numbers of distinguished individuals to visit the dying and the dead, and hence we find that dukes, and counts, and ministers, as well as doctors, have fallen under the scourge. Perrier grasped the hand of a patient dying of the pestilence, and soon after, he himself, then his wife, then his son, and then his sister-in-law, became affected. The son of the king was admitted to the Hotel Dieu, and, unless he is protected by the same spirit that saved from the plague Napoleon, who touched the sores of the sick in Egypt, and Desgenettes, who inoculated himself with its virus, we should not be surprised to hear of the disease within the walls of the Palais itself.

We have heretofore been undecided respecting the point in dispute. One account has seemed to show clearly that the disease is contagious, the next to produce doubt, a third to confirm the first impression, and so on. It is a matter of rare difficulty to settle one's opinion definitely on a subject so obscure. Under these circumstances, we have always held, and still maintain, that, until the disease is proved to be non-contagious, we should all do wisely to adopt such measures of protection as would be imperative if it were clearly and unquestionably known to be capable of direct communication from the sick to the well.

The history of the smallpox shows the wisdom of this rule. Notwithstanding its very decided, and now universally accredited, contagious character, it had existed longer, and prevailed more widely, than the cholera now has, before this character was acknowledged. Before it was even suspected, it had spread far and long, and even Sydenham appears not to have been apprised of its being at all contagious. During the many years of doubt on this subject, who, we would ask, displayed the most wisdom, those who acted on the principle we have uniformly upheld respecting the present epidemic—i. e. to regard it as contagious until it is *proved* otherwise—or those who exposed themselves, and threw open the doors of the sick to every passer by, and exposed their persons to the gaze and the touch of the curious? Unquestionably the former. Another illustration may be found in the history of the plague,—another, we apprehend our progenitors will say, in that of the cholera.

Smallpox, measles, scarlatina, &c., visit us occasionally. In some seasons they spread very generally, with great rapidity, and are extremely fatal. At others they are mild, and last but a short time. This variation must be owing to the state or constitution of the atmosphere, which, in some seasons, peculiarly predisposes the system to be affected by certain morbid agents. When this predisposition is general and strong, for the smallpox for example, many cases are produced by the slightest exposure to the sick, and many in which it is impossible to trace any exposure whatever. The same is more frequently true of measles. This disease, as well as the smallpox, sometimes breaks out in a family in the far country, who have had no possible means of deriving it from a previous case. Every city physician knows that like cases occur in the sphere of his own practice. On the other hand, it is *certain* that if three children are carried to the bedside, and allowed to touch a child who has the measles, two of them will most probably break out in a fortnight, and the third as probably escape the disease altogether. Now what should we think of a smart controversy growing out of the above cases—one party arguing that rubeola *is contagious*, because two children exposed to one sick of it, received the disease, and the other party declaring it *not contagious*, because the other child escaped,—and fortifying this opinion by the established and oft-noticed fact, that it had broken out in families who lived remote from any other human residence, and who had had no recent communication with any one laboring under such a malady? On both sides, facts without number might be adduced in support of each opinion, and the controversy might thus be carried on ad infinitum—at one time the proponderance being in favor of the contagionists, and at another of their opponents. The question, however, respecting this disease, has long been settled, and it is universally acknowledged that the measles is most generally communicated from the sick to the healthy, but that, like every other contagious disease, this is not its only mode of occurrence; that in certain states of the atmosphere, strongly predisposing the system to it, it occurs de novo, without any personal contact whatever, and that, after a long absence from a town or city, it most generally makes its appearance in many different parts of the place at the same time, entirely forbidding any supposition of a contagious origin.

Now of precisely this description appears to us to be the present dispute respecting the contagious nature of the cholera, and it seems to be protracted by a like combination of events. We are inclined to believe that the cholera is entitled to a rank among the *contagious diseases*, but that, whilst under certain circumstances it is not easily communicated by personal exposure, it is, under others, developed de novo, without the aid of any such exciting cause. This opinion seems to be justified by the whole body of facts now before the profession, and will, we suspect, be, eventually, the settled belief of the faculty of every country.

For the reasons of this opinion, we can only refer the reader to the mass of facts, and the conflicting testimony, already published. To bring, however, a single proof of the probable correctness of this opinion, we will relate a few cases in which the disease has absolutely and without any possibility of doubt, been produced by contagion, and one or two in which it has, with equal certainty, occurred without the existence of any such exciting cause. The first examples we take from the London Medical Gazette:—

Towards the end of January, two persons met at a hostelry in Morpeth, a small town in Northumberland, which the epidemic had not then reached. One had come from Hawick (a distance of fifty-five miles), to sell cattle; the other had just arrived from Newcastle, in which cholera was at that time prevalent. During their short stay, the latter was seized with cholera, and died; the former straightway returned to Hawick. He had scarcely reached home ere he was taken ill with the same disease, and which speedily proved fatal to him. His brother, his nephew, and his servant, all in direct communication with him, were next successively attacked; his clothes having been sent to a woman to be washed, she was also seized, as were next her child, and subsequently her husband—who died. The medical man, who had been called in to attend these cases, was then attacked, and, in forty-eight hours after, his sister, who resided with him, was also taken ill. Although the place contains five thousand inhabitants, only seventeen persons in all were affected; and of those, every individual had been exposed to whatever influence communication with preceding cases of the malady is capable of effecting. We have thus a healthy person, going to a distant town, where cholera is unknown—residing in a public house with a traveller from an infected district, who sickens and dies—we have him returning home to a retired country town, bearing with him a malady with which those only become affected who have intercourse with him mediately or immediately, while the rest of the inhabitants remain free from the epidemic or any other form of the disease. These facts rest on authority which is unimpeached, and, we believe, unimpeachable.

Again: a woman (A) being taken ill with cholera (April 5th), was removed to her brother's, in Halfmoon street, Bishopsgate—the disease not having shown itself in that vicinity. She occupied their only room, and slept first in the bed of one of the boys, but, this being found too small, was subsequently placed in that of her brother and his wife. The boy, who had been displaced, gladly took possession of his bed again, the sheets, we are expressly told, having been suffered to remain. As the night advanced, another change was adopted; a temporary bed was placed before the fire for the invalid; she was removed to it, and her brother now occupied his own bed, thus set at liberty, while his wife remained in attendance on the patient. Next morning their visiter was taken to the Cholera Hospital, and the family returned to their usual habits, no change or purification of bed-clothes having been adopted. April 7th, (B), the boy whose bed the original patient (A) had occupied, was seized with cholera, and died. Same day (C), his father, was taken ill, and died. April 8th, (D), the daughter of (C), was seized. April 9th, (E), another daughter, was also seized, and died; while (F), the wife of (C), had the premonitory symptoms, but recovered under prompt and efficient treatment. Here are six cases occurring in a street where no other instances of cholera had taken place; they are confined to the second floor of a house—those above and those beneath being alike unaffected. Still the evidence of contagion did not satisfy the neighbors, one of whom, occupying a different part of the same house, took compassion on the widow and her orphans, received them into her apartment, and, on the 19th, she herself died of cholera.

We now pass to the cases of the second description.

During the late prevalence of cholera in London, several cases were reported in the Mill-Bank Penitentiary—a place, the principle of which is to exclude the inmates from all communication with each other or with those outward. On inquiry, this report was ascertained to be well founded—six well-defined cases having occurred within ten days preceding the 3d of April. Of these six, three proved fatal—one in ten hours, and the other two in about fourteen—a sufficient proof that the disease in question was actually malignant cholera. The prison had been, up to the appearance of these cases, perfectly healthy, and quite free from bowel complaints ; but cholera was said to be in the neighborhood. We regard this fact as one of the most interesting, as it is one of the best authenticated, with which we have been made acquainted in regard to this disease.

Dr. Heberden, from whom we obtain the above fact, advances the idea, that, where the disease arises from causes apparently so insufficient, there must exist, in the individual so attacked, a strong predisposition to its development, and that this co-operating with the miasm in the atmosphere, constitutes the cause of disease. But, whatever may be the explanation of the highly respectable reporter, no doubt can exist of the occurrence of the cases, and of their development independently of any personal exposure to the sick. This, then, forms the second part of our brief illustration, and the reader will not consider us wedded to a theory when he deliberates on the opinion herein expressed, and brings to its test all the facts respecting cholera which have been so profusely laid before him within the last two or three years, and the circumstances attending the prevalence of the measles, hooping cough, and other diseases known to be contagious.

The error of the controversialists seems to have been in adhering to the *unity* of the cause :—in supposing that if a disease is ever propagated by contact with the sick, it cannot be produced in any other manner. To show that this is an error, and to close the present paper, we will merely add, that, in the Mill-Bank Penitentiary, the same institution in which the cases of cholera above related occurred, there took place, about the beginning of the last year, a case of *smallpox*, under circumstances precisely the same, and equally inconsistent with the supposition of contagion. The subject was a man who had been several months in the prison, and had had no communication personally, or by clothes, or by letter, for a length of time exceeding all possibility of its introduction by such means ; nor had any case of smallpox been in the penitentiary, though the disease was rife in the neighborhood. The appearance of smallpox under these circumstances is, we believe, very rare ; but we have known cases almost, if not altogether, as isolated, nearer home.

If these, our views of the cholera, are correct, the necessity of quarantine restrictions is so evident as to require no comment. The disease may, and probably will, reach us, notwithstanding such restrictions ; but that general would fall far short of his duty, who should leave the main road open to a formidable enemy, because there existed an obscure and circuitous pathway by which he might possibly gain access to his territory.

Treatment of the Cholera.—Among the numerous publications on this subject from the English press, we notice one by D. M. Moir, Surgeon, a gentleman well known in the literary world as the "Delta" of Blackwood's Magazine. It is entitled "Practical Observations on the Malignant Cholera," and is thus spoken of in an English Journal :—

"Mr. Moir's Practical Observations will be extensively read. They are the result of his experience in the small town of Musselburgh, where, in the course of three weeks, the deaths from cholera alone exceeded the average annual mortality of the parish. There are many practical remarks which deserve to be well considered by the profession, as they differ somewhat from received principles. Bloodletting in the collapsed stage, he says, is a most destructive expedient, and only hastens the catastrophe. Solid opium (as a stimulant) is his great remedy for this stage : it may, he says, be exhibited with brandy ; and he states it as the result of the experience of most northern practitioners, that the reaction is not in proportion to the stimuli employed, but in proportion to the collapse ; which is a very important proposition. He objects to mustard, and to the permission sometimes given to drink water ; but recommends grateful stimulants throughout, with hot external applications."

Remedy for Ophthalmia, Discovered by Dr. Seeds, R.N.—This old and zealous physician, whilst laboring under an obstinate attack of ophthalmia, determined to try the effect of an external application. It removed the inflammation in his eye with great rapidity, and believing that what was of service to himself would also prove serviceable to others under similar circumstances, he determined to publish the formula of his preparation. Mr. Guthrie, with his usual affability and good feeling, allowed Dr. Seeds to try the effects of the application at the Ophthalmic Infirmary, in Chandos Street. The results we believe were satisfactory. The following is the formula, with the mode of using it :—

R. Sp. æth. sulph. c. ʒi.
Sp. ammon. comp. ʒi.
Sp. vini camph. ʒi. M.

The lotion is applied over the eye-lids, forehead, and temples, in acute and chronic ophthalmia, and also introduced into the nostril with the point of the finger.

Local Application of Dolichos in Palsy.—M. Græfe, in his Clinical Surgery, also mentions that he has used the down of the Dolichos pruriens, as an external application to paralytic limbs, with advantage. His plan is to cover the part with a layer of the cowhage, laying paper over it, and maintaining the whole by means of a roller. After a few minutes, a slight degree of itching is experienced, which gradually augments, and is soon followed by slight cutaneous inflammation. The application is then removed. After the inflammation has subsided, the remedy may be used again, and a third time. According to. M. Græfe, some of his patients experienced only a diminution of the paralysis ; others were relieved only for a certain time, and some were permanently cured.—*Journal für Chururgie n. Augenherlkunde.*

P. S.—Since the foregoing was put in type, we have received advices from Canada, announcing the introduction of the cholera, its rapid spread and unexampled fatality, in Quebec and Montreal, and its appearance at Sorrell, St. John's, and La Prairie. The disease was imported into the former place, by the ship Carricks, from Dublin, on board which 41 persons had died of the disease on the passage. The first case broke out at Grosse Island, where the above-mentioned ship was at quarantine, and it extended with great rapidity, both among the emigrants and citizens. There appears, by the latest accounts (11th June), to have been, at the Emigrant Hospital, 39 cases and 26 deaths, and in private dwellings 20 cases and 15 deaths. A gentleman, who arrived at New York from Quebec, which city he left on the 12th, states, that he witnessed the first symptoms of the disease in *five* emigrants, whilst standing on the wharf, and, before they could be conveyed to the hospital, *two* of them died. He also adds, that a servant woman in his boarding house took the disease, and died in *three hours.*

The arrival of this malady on the American continent, and at places with which we have direct and constant communication, should awaken us to the importance of an immediate preparation to meet it among our own inhabitants. We propose next week to go more into the details of this interesting part of the subject. The authorities of Albany, Troy, and New York, have very judiciously adopted active measures to retard, and, if possible, prevent the introduction of the disease into those cities, and we trust our own vigilant police will extend to the inhabitants of this place every possible protection, as well as provide suitable hospitals for the reception of the sick, in case their efforts to exclude it shall be unavailing.

In Liverpool, the cholera has existed for some time; but a letter, under date of the 16th May, states, that such precautions had been adopted, that its ravages were not great. In Baltimore, the disease would probably have been introduced under circumstances the same as those attending its introduction into Quebec, had not the most rigorous measures been enforced upon the cargo and crew of the ship Breuda, arrived there from Liverpool. We trust these measures, now in operation, may be successful in excluding so unwelcome a visiter.

Mr. N. P. Willis, who, our readers will recollect, visited the Hotel Dieu to see the cholera, and concluded the next morning that it was not contagious because he was not sick, shortly after fell ill of the disease, but, we are happy to add, is recovered. His opinion will now, most probably, be equally decisive on the other side of the question.

Whole number of deaths in Boston for the week ending June 15, 39. Males, 18—Females, 21.

Of measles, 4—catarrh, 1—inflammation in the bowels, 1—scarlet fever, 5—stoppage in the bowels, 1—throat distemper, 2—dropsy, 1—lung fever, 1—consumption, 3—abscess on the lungs, 1—dropsy on the brain, 2—sudden, 1—inflammation in the head, 1—drowned, 3—hydrocephalus, 1—infantile, 1—brain fever, 1—unknown, 3—pleurisy, 1—intemperance, 1—diseased womb, 1—old age, 2—inflammation on the lungs, 1.

ADVERTISEMENTS.

MECKEL'S ANATOMY, VOL. II.

This day received, by CARTER & HENDEE, corner of Washington and School Streets—Manual of General, Descriptive, and Pathological Anatomy, by J. F. Meckel, Prof. of Anatomy at Halle, &c. &c. &c. Translated from the German into French, with Additions and Notes by A. J. L. Jourdan, Member of the Royal Academy of Medicine at Paris, &c. &c. &c., and G. Preschet, Adjunct Prof. of Anatomy at the School of Medicine, &c. &c. &c. Translated from the French, with Notes, by A. Sidney Doane. June 20.

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THE

BOSTON MEDICAL AND SURGICAL

JOURNAL.

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POISONING WITH COLCHICUM.

David Cole, æt. 44, a stout, muscular man, feeling pains in his bowels, to which he was subject, about six o'clock in the morning of the 8th of March last, swallowed, believing it to be rum, about two oz. of wine of the seeds of colchicum. He immediately discovered his error, but, knowing its effects in a small dose, conceived it would be followed by vomiting and purging sufficient to avert mischief. He sought no medical advice until four in the afternoon, when I first saw him. He was sitting in a chair, his elbows on his knees, and told me that he felt no inconvenience for an hour and a half after taking the dose, when pains in the bowels came on, but that he continued his labor until eleven o'clock, when pains in his stomach and bowels, retching, and copious vomiting of a yellowish fluid, compelled him to desist.

Four o'clock, P. M.—He describes the pain in the epigastrium as agonizing, and says it is like a knife piercing him. The retching is incessant, and extremely violent, but no fluid is evacuated; there is tenesmus; a small quantity only of fæcal matter has passed. No tenderness upon pressure, either in the epigastrium or abdomen. The appearance of the tongue is natural; the pulse small, slow, and feeble; breathing not much affected; the feet cold. His countenance is anxious; features sharp; his cheeks, lips, and palpebræ, purple. Upon attempting to walk, says he thinks he shall lose the use of his limbs. A mustard emetic was given, followed by copious draughts of warm water and gruel. These were soon returned, with apparently no mixture. Cathartic medicine was given, and immediately returned. Was put to bed; warm bricks were applied to the feet, and hot flannels to the stomach. To take forty drops of laudanum immediately; gruel and coffee plenteously.

Nine o'clock, P. M.—The retching, vomiting, and pain in the stomach, continue with undiminished violence; the fluid vomited contains a sediment like coffee-grounds; very thirsty; has made little water. Twenty drops of laudanum every two hours; a blister to the epigastrium; sinapisms to the feet; an enema every hour.

9th.—Six o'clock, A. M.—Has passed a sleepless night; the symptoms remain unaltered. The eyes are sunk; the feet warmer; skin generally natural; no perspiration; pulse scarcely to be felt; respiration hurried; great thirst; no urine. Enemata returned without fæcal matter.—Camphor, calomel, and opium, every three hours; an effervescing draught, with brandy, every hour.

Eight o'clock, P. M.—The retchings and pains continued until four o'clock, when the bowels were much distended. Has since had copious liquid stools, dark colored, and very offensive, and expresses himself better. Makes a few drops only of urine; loses his sight for a minute or two after getting out of bed to the night-chair. The pulse is scarcely perceptible, and occasionally intermits. He is perfectly sensible, but talks with effort; calls continually for water.—Aromatic confection, carbonate of ammonia and camphor mixture, with brandy, every hour.

10*th.*—In the course of the night his stools passed involuntarily, and in great numbers; his weakness increased, and he died a few minutes before five o'clock this morning, perfectly sensible to the last moment.

Sectio Cadaveris.—The face, neck, upper and front part of the thorax, insides of the arms, front of each fore-arm, and the insides of the thighs, were covered with patches of a purple efflorescence, as were also the integuments of the scrotum and penis. The muscles of the fore-arm were very rigid, and their fibres contracted into hard knobs. The great omentum, instead of covering the front of the intestines, was turned up between the stomach and convex surface of the liver behind, and the diaphragm in front, from the efforts of vomiting. There was increased redness in a portion of the peritoneum covering the jejunum. The stomach and bowels were covered with a thick, tenacious, but colorless mucus. On a portion of the mucous membrane of the stomach, near the cardiac orifice, and corresponding to its great arch, was a patch of redness about the size of a half-crown piece; its secretion here did not vary in tenacity, quantity, or color, from that of any other portion of the membrane. Upon dividing it at this part, its section presented nothing beyond its usual appearance; there was no pulpiness, no thickening, but a small quantity of blood was effused between it and the muscular coat, giving reddened internal appearance. Careful examination of that portion of the reddened peritoneum covering the jejunum demonstrated the like hæmorrhagic condition of the bloodvessels. Blood was effused between the peritoneal and muscular coats, but the mucous membrane corresponding to this portion was perfectly healthy—at least it was perfectly free from inflammation. No other trace of inflammation was observed in any other portion of the abdominal viscera. The gall-bladder was distended with healthy bile: the urinary bladder was contracted and empty.

The pleuræ costales were much reddened. The lungs were of a most beautiful purple color externally, did not crepitate, and were gorged with black blood, which had become effused, underneath the pleura pulmonales, in spots of various sizes; these were very numerous about their roots and edges.

The pericardium contained no fluid, nor was it reddened; yet numbers of ecchymosed spots were observed in that portion of it attached to the central tendon of the diaphragm, and also thickly interspersed upon the surface of the heart itself, more especially about the centre of the coronary vessels. Heart flabby, and easily broken down. The cavæ, the right auricle and ventricle, and the pulmonary artery, were filled with black blood, partly coagulated, partly fluid; the left auricle and ventricle empty.

I regret that neither my own entreaties nor the influence of the coroner were sufficient to obtain permission to examine the head. So little were the functions of the brain disturbed during life, that it is probable no other diseased appearance would have been observed, save a participation of its sinuses in the distention of the right side of the heart.

The deleterious effects of the bulb of colchicum are said to depend, in a great measure, upon the season of the year when it is collected; but the seeds matured only in the spring must possess uniform properties.

Colchicum is classed, by most writers, as an acrid or rubefacient poison; and poisons of this class are defined as producing inflammation when applied to the intestinal canal, and, if taken in sufficient quantity, the same effects as the corrosive. No such effects, however, followed its exhibition in this case; for, in addition to the want of the usual post-mortem appearance of inflammation, I consider the patches of redness, in the stomach and peritoneum, too partial for inflammation from such a cause. The jejunum, too, possesses a singular immunity from disease, as is shown by the quotation of Andral's table, in Macintosh's Practice of Physic. The hæmorrhagic condition of the system, observed here, accords with the observations of Dr. A. Thomson, published at p. 281 of the Lancet for 1831, who says, that colchicum has an effect of producing effusion of blood from all the mucous tissues, the skin alone excepted, and that a peculiar laxity is observable in the cellular membrane, producing a diminution, if not total destruction, of its adhesive powers. The purple efflorescence of the skin, the effusions of blood between the coats of the stomach and the jejunum, and underneath the pleuræ and the pericardium, in this case, all prove the accuracy of these remarks. I feel satisfied that not the slightest inflammation existed in either of the above-mentioned structures; for, with respect to the stomach and bowel, where redness was perceptible, the mucous membrane was unchanged in structure; there was neither pulpiness nor thickening, nor did it present a more vascular section than other portions of the membrane: a very important observation, too, its secretion was not changed in quantity or consistence. With respect to the lungs, it was difficult to trace, or rather distinguish, either bloodvessels or bronchiæ; a section of them seemed more like the section of a clot of venous blood, so greatly were they congested with black blood. The state of the breathing during life bore no kind of proportion to this appearance.

Colchicum is also classed as a poison acting upon the nervous system by absorption, and, through this medium, exerting a peculiar influence on the arterial circulation; and this appears to be its true modus operandi. Sir Everard Home found, by direct experiment,[*] that its effects were the same, whether taken into the stomach or introduced into the jugular vein, only that, in the latter case, its effects were more quickly developed than in the former, and hence he concludes that its action upon the different parts of the body is through the medium of the circulation, and not from its *immediate* effects upon the stomach and intestines. The primæ viæ have been frequently, and perhaps generally, found inflamed, where colchicum has been taken in large quantities; but this is no proof of its *direct* effects upon them, since arsenic will produce inflammation there (the stomach and bowels) when applied to the external surface of the body! * Sir Everard Home found that colchicum reduced the pulse in all cases where it was ordinarily used, and this is a material help in enabling us to trace the order in which the three great functions of the body are severally affected by it. It would seem that the heart is deprived of nervous energy, and in consequence beats feebly. Now, by the natural process of inspiration, the trachea and bronchiæ, with their minute ramifications, together with the air-cells, are distended with atmospheric air—an elastic fluid. At the standard of health, the heart contracts with a force probably three hundred times greater than the force exerted by the pressure of the air in the lungs, and the blood, instead of being impeded, flows more freely; hence the important connexion between the circulating and respiratory functions. We have seen that colchicum, in an ordinary dose, depresses the heart's action. What must then be expected to follow the administration of a dose like that in question? for it does not appear to be one of those remedies, the principle of whose action is altered by its dose! The action of the heart is almost paralyzed; it can no longer overbalance the pressure exerted by the air in the lungs; the blood can no longer be propelled as usual through their vessels; congestion takes place in the veins; the blood is unarterialyzed (and, whether its exposure to the action of the fibrillæ of the ganglial system of nerves, in its passage through the arteries, has any influence in effecting this essential change, the lungs are not able to exert their necessary preparatory action), and unarterialized blood gradually destroys the action of every part through which it circulates. The organs of digestion, assimilation, circulation, and secretion, were severally deranged in function, whilst the intellectual and locomotive powers were little affected. This proves the great extent to which the sympathetic or ganglial system of nerves was affected, and the almost immunity of the cerebro-spinal system.

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[*] Philosophical Transactions for 1816, p. 257.

It must be obvious that no treatment in this case held out any hope of the patient's recovery. When first I saw him, he had swallowed the dose ten hours, when time had been allowed, over and over again, for it to enter the circulation. An emetic, or stomach-pump, employed before this had taken place, would have dislodged it, and probably have saved his life.

Since poisons act in so many different ways upon the animal economy, some primarily, through the medium of the nerves, without being absorbed, producing death by suffocation from paralysis of the respiratory muscles, or by sincope—others by entering the circulation, and exerting their influence on the heart, brain, and alimentary canal—others through the same medium on the spinal marrow, and, lastly, others having a purely local action on the mucous membrane of the alimentary canal—and since this difference in their physiological actions renders a plan of treatment safe and justifiable in some instances, which would be followed by the most tragic effects in others, it behoves us to be aware of the order of the parts of the system through which they exert their influence; for, as each has its own modus operandi, it is by a knowledge of this only, that we can arrive at scientific and safe indications of cure. Magendie, for instance, found that a state of depletion facilitated absorption, but that a state of congestion impeded it. How important a knowledge of this fact is in the successful treatment of two familiar poisons—arsenic and corrosive sublimate! Dr. Paris has classed the former with those poisons which produce their effects by absorption—the latter with those having a purely local or corrosive action. Both are followed by inflammation of the primæ viæ; yet the experiments of Magendie teach us, that, if we deplete to subdue the inflammatory symptoms when arsenic has been taken, so long as any portion of it remains in the stomach and bowels, we necessarily hasten death by promoting its absorption. On the contrary, corrosive sublimate, having a local action, and not being absorbed, needs no such precaution: we may bleed from the outset.

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* Paris's Pharmacologia, sixth edition, Vol. I., p. 248.

The same principle is applicable to the poison of colchicum. It produces its effects by absorption. We should, therefore, be very cautious how we bleed, to subdue any inflammatory action of the stomach and bowels, until the poison has been completely ejected from them.

Dudley, April 19th, 1832. THOMAS FEREDAY.

DISEASES OF NEW HAVEN.

Observations on the Diseases which prevailed in New Haven, Con., during the Winter of 1831–2. By V. M. Dow, M.D.

Communicated for the Boston Medical and Surgical Journal.

ABOUT the 15th November, the weather suddenly set in severely cold and boisterous, and continued so for a full month without interruption, the earth's surface being covered with snow during nearly the whole time. The two succeeding months, on the contrary, presented nearly every variety of weather of which our winters are susceptible in this latitude, and were remarkable only for irregularity and sudden vicissitudes. Immediately on the commencement of winter, cases of catarrhus epidemicus, rubeola, and pneumonitis, began to present themselves. Cases of scarlatina were also frequent during the winter, though not more so than during the summer previous.

Influenza, or Epidemic Catarrh.—Making its appearance simultaneously with the sudden arrival of cold weather, this disease was naturally enough considered, by the vulgar, as an effect of this atmospheric peculiarity; while by others, more philosophic, it was attributed to an unusual *dryness* of the air, which was demonstrated to obtain, during the first month at least of the epidemic, to such a degree that the air, during this period, contained only about half its usual supply of watery vapor.

This latter circumstance might, with much apparent plausibility, be admitted as the cause of influenza, had we never known of its having existed independently of it. But, if we turn our attention to the same epidemic as it appeared in England, we shall find that it commenced there in the month of June last—a month, according to accounts from that country, "remarkable only for a high temperature, a *singular humidity* of the air, a soft wind from the south-west, and a bright, hot summer's sun," the thermometer generally ranging from 60 degrees to 75 degrees, Fahr. If we contrast this description with that of the first thirty days from the commencement of the epidemic in New Haven—the weather suddenly becoming unusually cold, boisterous, and stormy, with northerly winds, and, instead of humidity, with a remarkable dryness and sharpness of the air—and if we consider that, notwithstanding all the diversity of the season, the epidemic presented substantially the same features in both places, we shall be compelled to place very little credit to the agency of the atmosphere in causing this disease.

In China it was noticed in the month of January, 1830; in Manilla, in September, 1830; in France, in May and June, 1831; in England, in June and July, 1831, and in the United States it prevailed chiefly in December and January, 1831–2.

This wide-spreading epidemic, which has so often traversed the habitable globe, has, in its different visitations, appeared so uniformly in the same garb, and been so often and well described, that it is scarcely necessary to enumerate its symptoms. Suffice it to observe, that, in its late return, it wore the same characteristic marks that it had done previously. The catarrhal affection was attended by the same fullness and pain of the head; the same languor, oppression, and anxiety at the præcordia; the same quick, contracted, half-suppressed pulse; the same dense, white, short fur on the tongue, and the same anorexia, sometimes amounting to nausea. Efflorescent patches, appearing to the eye like erysipelas, but with more accurately defined margins, suddenly making their appearance, and as suddenly vanishing or shifting to some other part of the skin, were observed in several cases, especially of children. Contrary to what has usually been observed of influenza, children were not exempt from it during the past winter. One infant whom I attended was only ten days old, while great numbers had the disease at the age of a few weeks or a few months. In fact, the disease not unfrequently proved fatal to infants who had it, while it was not attended with danger to those from two years of age upwards.

In treating the disease, bloodletting was rarely resorted to, as it seemed not indicated by the pulse or other symptoms. A few doses of calomel, of five or eight grains each, by itself or combined with Dover's powder, given at intervals of twenty-four hours, exerted the best effect in restoring the natural secretions of the alimentary canal, and was the only active medicine usually required. Expectorants and mucilages were of some use, and, in the latter stages of the disease, wine and alcohol were sometimes useful.

Rubeola.—Never was this disease more prevalent in this city than during the past winter. It appeared about the same time with the influenza, and, as it had not visited us for several years previous, it found a vast many obnoxious to its attack. It is even doubtful which of these two diseases may have produced the greater number of patients. Besides children, a great many adults suffered from it—many who had lived through successive epidemics of measles with impunity—and such were much more severely affected by it than children.* Infants at the breast more often escaped an attack of measles than those of any other age; it being often the case, that, of several children in the same family and same room, all would have the disease except the infant. A similar immunity was also enjoyed by infants in relation to scarlet fever, during the same period, though there were exceptions, of course, in both cases.

The disease appeared in its usual form, was rather unusually intense, but not malignant, nor yet so benign as it is often witnessed. In proof of its benignity, it is sufficient to remark, that most of the cases terminated favorably, even where no medical aid was called, and, what is still more remarkable, under a kind of domestic management the very worst that could have been devised. This remarkable method of treating measles consists in keeping the patient hot in bed, and plying him with all manner of stimulants internally, from the first appearance of the catarrhal affection until he gets well or dies, or until the good dames think he will die, when they usually call a physician. Treated in this manner, it is only remarkable that a greater number of cases did not terminate in bronchitis, phrenitis, or pneumonitis. But it is all done with the intention, in the first place, of bringing out the eruption, and, in the second place, of keeping it out. In fact, a great many cases of influenza were treated in the same way, for a week together, on the supposition that they were measles, and with quite as much propriety as if they had been measles. The first symptoms of measles and those of an attack of influenza, as it appeared in children, so exactly similated each other, that they could not in all cases be distinguished in the early stage of the complaints. In some cases, the two diseases actually co-existed in the same patient, one having taken the lead for several days, or a week, or even a longer time. Now it scarcely need be observed, that, as respects the management to be adopted in a given case, under the eye of a physician, it matters not a whit whether the case be measles or influenza, or whether it should be called lung fever, or the rattles, or the phthisic; since the disease must be treated for what it *is*, and not according to what it may be called.

On the whole, those cases did best which were subjected to a moderately antiphlogistic treatment, though severe cases of adults often required free depletion by venesection. In the few cases which proved fatal, death was usually the result of bronchitis or pneumonitis, superinduced upon the measles by hot regimen and stimulants, or allowed to take place by not adopting an opposite plan of treatment sufficiently early.

Pneumonitis, of which we generally see specimens every winter, was, during the last, rather more rife than usual. Its accompanying fever was usually a synochus, but few cases being sufficiently entonic to require bloodletting. Its symptoms, during the first two or three days from the attack, were often well calculated to mislead in forming a diagnosis. One case, for instance, came on with severe pain of the head, succeeded by delirium: another was ushered in with obstinate vomiting and extreme irritability of stomach; while other cases commenced with severe pain in a limb, or some other part of the body foreign to the lungs. Two, three, or even four days frequently elapsed, with one or other of the above affections, before any pneumonic symptoms made their appearance. After the regular symptoms had come on, the pain and disease would, in many cases, shift from one lung to the opposite, on or about the fifth day. That the *disease* shifted as well as the pain, appeared evident by auscultation. At or about this period, we usually observed symptoms of a crisis, which, in severe cases, were often deceptive, and not unfrequently followed by worse symptoms than had before been present. The sputa were always more or less bloody, and it was observed that those recovered soonest, and encountered the least hazard, who expectorated the most blood.

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* This circumstance was remarkable also in this city and vicinity.—*Ed.*

A remarkable disparity between the frequency of the pulse and that of the respiration was also observable; probably it always exists in this disease, but is not sufficiently noticed by authors. In health, there are four pulsations of the artery to one respiration; and, in fevers not affecting the lungs particularly, although the frequency of the pulse may be increased to 110 or 130, the respiration will be found to be also increased in frequency to a degree very exactly corresponding. But in pneumonitis we often find the pulse beating but twice or three times during a respiration. This disproportionate frequency of respiration evidently indicates diminished capacity of the lungs, in consequence of some portion of these organs having become more or less impermeable to air. Attention to the degree of frequency of respiration, compared by the convenient standard of the pulse, affords us no mean information of the extent of the injury suffered by the lungs, or of how great a proportion of these organs has become inactive.

In the few cases which terminated fatally, autopsic examinations presented engorgement or hepatization of considerable portions of the pulmonary tissue, and rarely some slight adhesions.

The treatment consisted in the pretty free use of blood root, given in doses short of producing either nausea or narcosis; in administering antimony and calomel in alterative doses; in blistering, diaphoretics of Dover's powder, &c. Bleeding was sometimes useful at the outset, but rarely was required to be repeated. Cathartics were almost daily necessary, as the bowels were unusually torpid, and surcharged with bilious matter.

Scarlatina, which had existed more or less in this region for several years, with occasional intermissions, seemed somewhat modified during the past winter. Frequent cases of it appeared during this period, but they seemed less typhoid, and had less tendency to gangrene, no fœtor of the breath being observable, even where the throat was ulcerated. The eruption was more in form of minute papulæ, than in that of the broadly-diffused erythematic patches so often observed.

Was this modification of scarlatina owing to the coldness of the atmossphere acting as a remedial agent, or to the prevalence of the different epidemic constitution, which brought with it measles, influenza, &c.?

Some few of the cases were benefited by venesection. One patient I bled the second time with advantage. Generally, however, it was sufficient to give one or more emetics of ipecac., procure daily discharges from the bowels, apply ammoniated liniment to the throat externally, and use astringent or acid gargles. At the end of the first week, infusion of bark and snakeroot, with a little wine, were allowed, and these were all the stimulants and tonics necessary.

Cholera.—Not the least peculiarity attending the diseases of the past winter, was an extraordinary tendency to disorders of the first passages. Cases of cholera biliosa were nearly, if not quite, as frequent as they usually are during the months of July and August. In some, obstinate vomiting would come on and continue several days, and be stayed at last by a full dose or two of calomel, to act as a cathartic. In others, the derangement of the alimentary canal showed itself in form of bilious colic, or in form of bilious diarrhœa. But, whatever were the symptoms by which this gastric and intestinal derangement showed itself, it was always to be met successfully by free doses of cathartics, of which calomel, alone or in combination, stood pre-eminent. In short, this peculiar disturbance of the stomach and bowels showed itself more or less in all of the other diseases before mentioned. In all of them, an unusual demand for cathartics was indicated, and these required to be repeated almost daily, to eliminate the ill-conditioned, fœtid, and black sordes. It was even surprising, in some cases, to witness, after ever so free an evacuation of the bowels, how speedily the latter would again become surcharged with vitiated secretions, and call for further evacuants.

None of the above diseases seem to have been unusually severe or malignant, nor was the proportion of fatal cases greater, compared with the whole number attacked with disease, than in ordinary seasons. But there were an unusually large number of persons attacked. From a record of deaths kept in this city, the mortality for the months of December, January, February, and March last, was just about double the average number for the twelve preceding months.

New Haven, June 18th, 1832.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, JUNE 27, 1832.

THE CHOLERA.

We cannot but commend in high terms the vigilance and discretion exercised by our City Government in devising and executing measures to prevent, if possible, the introduction of this pestilence into our borders, and still more to prepare the city for its reception. By a thorough purification of every house, street, lane, alley, and yard—by presenting to every family the most effectual means of protecting its members from the disease, should it come, and urging on them a rigid observance of local and personal neatness, mental equanimity, and temperance in eating, drinking, and all things else, they do all that can be done by the powers with which they are invested.* Nor should we pass over, without notice, the liberality of the Common Council, who have, by a unanimous vote, placed at the disposal of the health officers the sum of *fifty thousand dollars*, for the purposes of their appointment.

We proposed last week to enter more in detail respecting the mode of meeting the disease on its access. Since then, the Consulting Physicians of the City have offered a report to the government, which contains so much good counsel in a short space, that we shall offer it as a substitute for any further remarks on the subject—all that is left for the physician to do being to follow up the same principles of treatment, varying it according to the symptoms of each case. The free use of the carbonate of soda, in doses of ʒi., frequently repeated, has been found very serviceable in some cases of this disease. The Report was in the following terms :—

The Consulting Physicians of the City of Boston, having been requested by the Mayor and Aldermen to prepare some instructions for the relief of persons attacked with the Asiatic Cholera, before medical advice can be obtained, and also for the prevention of this disease, report as follows :—

There are two kinds of the cholera cases—one excessively severe and sudden in its attack, the other comparatively mild. The former requires the immediate use of remedies ; the latter may wait the attendance and advice of a physician.

The symptoms of the violent form are great coldness, dizziness, sickness of the stomach and vomiting ; diarrhœa, small watery discharges, violent cramps in every part, and a livid color of the body.

The following remedies should be used directly, when the symptoms occur :—

1st. Give for an adult 50 drops of laudanum, in a wine glass of hot brandy and water,† equal parts of each, and repeat it every 15 minutes, until four doses have been taken, so as to give, in the whole, 200 drops ; if thrown up, repeat the laudanum in a teaspoonfull of brandy.

2d. Apply bags of hot sand to every part of the body and limbs of the patient. Large woollen cloths, wrung out of very hot water, may be applied in the same way, provided they are kept from cooling.

3d. Make a poultice or paste of common mustard, mixed in the same way as for ordinary use ; apply this hot over the whole surface of the bowels.

4th. Give an injection made with a gill of starch, arrowroot, or gruel, with one teaspoonfull of laudanum in it.

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[*] In connection with this subject, we would notice and recommend, for universal use, a small machine called a "Stench Trap," by which every family, at a very trifling expense, may entirely exclude from their premises any effluvia from drains and sewers. They are affixed to sinks, and may be had of J. G. Loring, in Merrimac Street.

[†] We should prefer lemonade to water, if readily obtained.—*Ed.*

Milder Form of the Disease.—This is often preceded by a looseness of the bowels and sickness at the stomach. When these symptoms come on, the patient should omit the use of solid food, and take as little as possible into the stomach. A proper nourishment in this state is arrowroot or rice water. For drink, small quantities of pure water* or tea.

The patient should keep in bed. If the bowels have not been freely emptied, an even dose of powdered rhubarb may be given. This is to be followed by an injection, every four hours, of half a pint of flaxseed tea, with twenty drops of laudanum in each. The surface of the bowels should be blistered. If the patient is much exhausted, a teaspoonfull of tinct. of cinnamon, in half a wineglassfull of hot water, may be given, once in half an hour, for three or four times.

Means of Prevention.—Cleanliness, domestic and personal, is of the first importance in the prevention of cholera. Every house and shop, especially provision stalls, should be made clean and sweet. Outhouses should be freed from all offensive matter. Cellars, especially, should be cleared of putrid vegetables, ventilated, and thoroughly dried. Beds and bed clothing should be daily exposed to currents of fresh air.

Personal cleanliness must be carefully attended to. Those who can do so should, in hot weather, bathe in sea water two or three times a week, and others should wash the whole body with warm water and soap at least twice a week. Children should not be omitted in this process. As few individuals as possible should live in the same room; and, where a number are found together, means for dividing and giving them more healthy lodgments should be provided at the public expense.

Crowded meetings, especially in the evening, should be avoided.

Food.—In a disorder which affects the stomach and intestines, all attempts at prevention would be useless, without a most strict attention to food. A fact, established by the experience of all Europe and Asia, is, that the "cholera attacks the tippler," and makes him his first victim. A little excess, even in wine, exposes to the disease. Liquids of all kinds should be moderately used. The safest are common tea, and teas made of domestic herbs, taken warm. Acid drinks are pernicious. Cold water, if pure, may be taken in moderate quantity, but, when the weather is hot and the thirst great, the mouth, the hands, and the face, should be previously washed.

Excess of solid food is a sure preparation for the disease. The best articles of food are bread, eggs, fresh meat, fresh fish, and rice. Perfectly good and thoroughly boiled vegetables stand next, as potatoes, asparagus, etc. All uncooked vegetables, as salads, are dangerous. Fruits, unless very fine, had better be avoided. Strawberries, taken by themselves, or with the addition of a little wine, are the least likely to do mischief. Pastry, preserves, and pickles, scarcely need be mentioned as requiring a total prohibition. All unusual fatigue and exercise, exposure to cold, wet, and to the night air, should be avoided. The dress should be carefully regulated according to the changes of temperature. Flannel next to the skin is universally recommended, and to those of a more delicate habit is indispensable.

What we have already said on the subject of ventilation, will make it sufficiently understood that we believe the pure air of the country to be more salutary, during the hot season, than that of a large town. While, therefore, it is not indispensable to flee the city on the appearance of the cholera, and while we doubt not it will pursue a different course from the yellow fever, and infect the country if it does the town, we should advise those who have the means of selecting their residence, to quit the frequented walks of men, and seek retirement and sequestration during the prevalence of the epidemic.

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* This article is with difficulty obtained in this place. The water of the aqueduct is to be preferred, unless perfectly sweet rain water is to be had.

Finally, we recommend *a good conscience*, and *a fearless performance of duty*, as the best of all preservatives against this disorder. It is well known to physicians, that the most timid are most frequently the subjects of epidemic diseases. This is peculiarly the case with cholera, because it affects the nervous system. We therefore strongly urge on our fellow citizes a perfect confidence in the wisdom and goodness of God, and a full assurance that those who perform His will, by the devotion of their labors to the sick and suffering, are taking the surest means to escape the attack of this disease.

Signed, JOHN C. WARREN,
BENJAMIN SHURTLEFF,
GEORGE C. SHATTUCK,
GEORGE HAYWARD,
JOHN RANDALL.

MASSACHUSETTS REPORT ON CHOLERA.

THE committee appointed by the Counsellors of the Massachusetts Medical Society, to report on the subject of the cholera, have published the result of their labors at a fortunate moment, and we have perused it with the greatest satisfaction. It appears to contain a summary of all that is at present known respecting the several points of the disease, and is drawn up with great care, ability, and impartiality. The committee have taken the part not of an advocate, but of a judge, and their report is a lucid charge, presenting, in a clear and unprejudiced manner, all the important evidence now before the public, respecting the nature, history, treatment, &c., of the disease, and leaving the profession to form their opinions on this evidence. We hope the circulation of this report will not be limited to the fellows of the Society ; it is decidedly the best production on the subject we have yet seen, and should be in the possession of every member of the faculty, and studied with fidelity and confidence.

No room is allowed us at present for a notice of the views presented by the committee. Reserving their minds open to the influence of the further testimony which will be developed during the future course of the disease, they have not shrunk from a proper expression of the conclusions to be drawn, from the history of the disease, respecting the disputed point of contagion. *So far as present evidence goes*, they incline to the belief, that the preponderance is in favor of the contagiousness of the disease, or its capability of being communicated by the sick to the well, but that its virus or miasm is not capable of being conveyed, certainly to any great distance, by means of merchandise, excepting, perhaps, the immediate clothing of the sick. On this subject of contagion, however, the committee do not deem the past history of the pestilence sufficiently full to warrant a very decided opinion ; but the evidence they have adduced in support of its contagiousness is very strong, and appears to us to be unanswerable.

Up to June 18th, the time of our last advices, there had been in Montreal 1635 cases, 312 deaths, and, during the last twenty-four hours, 431 new cases, and 82 deaths. At Quebec there are appearances of an abatement in the malignity of the disease. At Plattsburgh there have been 7 cases of disease *supposed* to be cholera, and 4 deaths ; but we trust it may turn out to be some less dreaded malady.

We acknowledge the valuable communications of Professor Tully, and defer the commencement of their publication until next week, as it is desirable that the whole should appear in the same "Monthly Part" of the Journal.—The essay on Contagion, from another esteemed correspondent, was received too late for this number.

Monthly Notice of New Publications.

An Introduction to the Study of Human Anatomy. By JAMES PAXTON, Member of the Royal College of Surgeons, &c., with Illustrations. First American Edition, with Additions by WINSLOW LEWIS, jr., M.D., Demonstrator of Anatomy to the Medical Department of Harvard University.

WE noticed, some weeks since, the appearance of Mr. PAXTON's work on Anatomy, and expressed it as our opinion, that a reprint here, well executed, would be both popular and useful, and would prove a safe, if not a profitable enterprise. It gave us much pleasure to hear that the task of preparing an American edition had fallen into such able hands as those of Dr. LEWIS, and we had no doubt that, under his judicious direction and care, it would be rendered the most useful manual of anatomy among us. We are not disappointed in the result. The text is in many instances remodeled and improved, and several new remarks, of considerable value, are added. As respects the mechanical execution of the work, it is sufficient praise to say, that the excellent arrangement of the plates in the English edition is strictly retained, and that both the typography and the engraving will very fairly sustain a comparison with that of the foreign work. The latter, indeed, deserves particular mention, both for its intrinsic merit, and for having been executed by a native young artist who is but little known to the public. Some of the plates are even better executed than the English, and the clearness of the references is admirably preserved. As an elementary book for students, and particularly for those who commence their studies without having within their reach any facilities for dissection, it is incomparably the best treatise with which we are acquainted, and it will not fail to afford a most convenient work of reference to those who, amidst the engagements of active practice, have little opportunity for pursuing minute anatomical researches, but will find it desirable to refresh their memories, from time to time, in regard to the leading and prominent facts in the science. By practitioners in the country, it will in this way be found extremely convenient and useful. In fine, we do not hesitate to express our conviction, that it is only necessary for the value of the work to be generally known, in order to secure it a place in the library of every physician.

Outlines of the Science of Life, which treats Physiologically of both Body and Mind. Designed only for Philosophers, and other Candid Persons. To which are added, Essays on other Subjects. By Elisha North, M.D., Member of the Connecticut Medical Society, &c.

Dr. North is a close and vigorous disputant; his work is marked by a spirit of independence, and, if it does not contain much that is absolutely new, exhibits some new views of the subjects he discusses, and some nervous reasoning. His fundamental principle is, that the phenomena of life are the result of organization, and that those of sensation and reflection, belonging to those of life, require no aid of an immaterial soul in order to explain their production. There are, according to him, six agents in vital powers, perpetually acting within every one, to occasion life. These are—1, atmospheric pressure; 2, caloric; 3, vital steam; 4, oxygen; 5, light; 6, electricity. These powers, and likewise organization, are maintained by solid and liquid food and by the blood, by external heat, light, and electricity.

The property of sensation and volition is occasioned by the united action of sensitive, solid, and fluid matter, and the sentient spirit, aided by caloric, &c., which spirit is perpetually generated from the circulating blood. One of the main distinctions between plants and animals is, that the living matter of the former is irritable merely, while the latter possesses both irritable and sensitive matter. The nisus formativus, or restorative power, is common to both. The united configuration of a suitable quantity of the organic spirit of the brain, and the fluid and flabby substance of that organ or sensitive matter, and the organs of sense, are necessary to the production of sensation and thought.

The succession of animated beings is accomplished by sexual organs. The male and female semen are both alive, or they possess vital properties, and their sympathetic union occasions a new being, which has the propensities of the parents.

Such is an epitome, nearly in the author's own language, of his views on the cause of life, and of the animal and intellectual functions. It is to be remarked, that, in this view, the prime mover or maintainer of life, within the system, is the circulation of blood. This, as Dr. N. truly observes, forms a connecting link between the external means of support and the internal operations of the system. The food eaten is converted into blood. The air breathed, and atmospheric pressure, are necessary to the circulation of the blood. The circulating fluid nourishes and repairs the solid organs, and sustains the animal fluids and spirits. Each organ has its peculiar propensity, or nature and function. The animal spirit, or vital steam, and other fluids, are perpetual stimulants, vivifying all the animal organs. Heat and electricity are also constantly operating. Hence it is evident that life is a forced state, &c.

Voluntary motion, then, thought, the faculties and the passions, are functions of human organized matter, and continue to be so while the requisite stimulus or impulse within is furnished by the circulation of the blood, and the necessary motive power from without, is supplied by atmospheric pressure and by caloric. When, from the failure in the part of either, the stimulus ceases to be furnished, the matter in question parts with these properties or loses its vitality.

In giving this brief sketch of the views advanced by Dr. N., it would be unjust not to add, that he disclaims all scepticism with regard to the fundamental doctrines of religious belief. He considers the proof of a future state to rest simply on the evidence of revelation, as given in the scriptures, and thinks that the cause of religion has been injured by attempting to defend it by arguments derived from physiology. Without admitting the truth of this remark, we shall for the present decline any argument on the subject, as it is our intention, at some future period, to take it up at greater length. Those who possess a taste for abstruse speculation, for whose perusal the work is avowedly designed, will find both amusement and instruction in its careful perusal.

A Treatise on Breeding, Rearing, and Fattening all kinds of Poultry, Cows, Swine, and other Domestic Animals. By B. MOUBRAY, Esq. From the Sixth London Edition, with Additions, &c., by T. G. FESSENDEN, Esq. Boston.

THIS treatise has given us great pleasure. Those of our brethren who reside in the country will also derive from it much practical instruction. The subject it discusses is one that requires much reform among us. Most domestic animals are treated according to former customs, or without much attention or care ; but they, as well as plants, are capable of being greatly improved, and rendered more profitable, by an enlightened culture. The mode of effecting this is now laid before the husbandman, by Mr. MOUBRAY, in a very brief, clear, and interesting manner, and the volume is much enhanced in value to the American cultivator, by the practical additions and alterations of the distinguished editor who prepared the present work for the press. Having ourselves solicited a re-publication of this treatise, we have indulged ourselves in this gratuitous notice of it; for, although not a medical work, it illustrates a subject in which the great body of the profession are more or less interested.

Library of Practical Medicine. Published by order of the Massachusetts Medical Society, for the use of its Fellows. Vol. II. 8vo. pp. 263. Boston.

The plan of the Medical Society of this state, to publish annually a volume containing some standard treatise on practical subjects, was favorably noticed the last year, when we offered some account of the first volume. That contained Smith and Tweedie's works on Fever. The present contains the Principles of Surgery, by Mr. Pearson, and Abernethy's well known Observations on the Constitutional Origin of Local Diseases, and on Aneurisms. The selection is a happy one. The works of Mr. Abernethy are full of instruction to the medical man, and should be familiar to every one who pretends to pursue an enlightened practice. They are, indeed, already in the library of most physicians in this place, but we shall cheerfully suffer the inconvenience of a duplicate, for the sake of extending the benefits of the work to those who will now receive it for the first time. The treatise of Mr. Pearson is more rare, but no less valuable ; and, although it might, from the title, be thought exclusively useful to the *Surgeon*, it will be found to discuss, concisely and practically, the numerous common diseases, which, though strictly surgical, are always falling under the care of every medical practitioner.

Whole number of deaths in Boston for the week ending June 23, 26. Males, 10—Females, 16—Stillborn, 1.

Of consumption, 6—intemperance, 3—dropsy on the heart, 1—inflammation, 1—measles, 3—old age, 1—scarlet fever, 2—childbed, 2—inflammation on the lungs, 1—marasmus, 1—lung fever, 2—typhus fever, 1—unknown, 2.

ADVERTISEMENTS.

MECKEL'S ANATOMY, VOL. II.

This day received, by CARTER & HENDEE, corner of Washington and School Streets—Manual of General, Descriptive, and Pathological Anatomy, by J. F. Meckel, Prof. of Anatomy at Halle, &c. &c. &c. Translated from the German into French, with Additions and Notes by A. J. L. Jourdan, Member of the Royal Academy of Medicine at Paris, &c. &c. &c., and G. Preschet, Adjunct Prof. of Anatomy at the School of Medicine, &c. &c. &c. Translated from the French, with Notes, by A. Sidney Doane. June 20.

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THE

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CHLORITE OF POTASSA.

On the Chlorite of Potassa. By WILLIAM TULLY, M.D. Prof. Mat. Med. and Therap. in Yale College.

Communicated for the Boston Medical and Surgical Journal.

IN that part of the country in which I commenced the practice of medicine, the salt formerly called OXY-MURIATE OF POTASSA, HYPER-OXY-MURIATE OF POTASSA, and HYPER-OXYGENIZED-MURIATE OF POTASSA, was considerably employed as a remedial agent. On reference to those works upon materia medica which treated of it, I (even then) found the following statements in regard to its powers and applications, and the same still maintain their place in all the subsequent editions of the same books, without either diminution, extension, or alteration.

According to DUNCAN, this salt "always acts as a stimulant, and sometimes as a diuretic." "In some cases, in which it produces little or no effect, it passes off undecomposed in the urine." "Some years ago, it was strongly recommended as an antisyphilitic remedy," and "its use was extended to other cutaneous diseases, and to fevers, as a general stimulant." "Its dose is from three to ten grains, gradually increasing to twenty-five or thirty, four times a day." "At one time many singular cures, performed by its means, were recorded, but it has fallen into disuse," etc.—(*See Duncan's Dispensatory, article "Aqua Alcalina Oxy-Muriatica."*)

According to MURRAY, "as a remedy, hyper-oxy-muriate of potassa may be classed with nitric acid," which is placed among the tonics. "It was the hypothesis of nitric acid's acting medicinally, by imparting oxygen to the system, that led to its use." "This salt contains a large quantity of oxygen, which is not retained in it by a strong affinity." "Its operation, in checking or removing the symptoms of syphilis, is similar" to nitric acid. "It increases the force of the circulation, and excites the actions of the system." "Its efficacy as an antivenereal remedy was inferred, from the trials made of it, to be superior to that of nitric acid; yet it does not appear to be equally advantageous as an auxiliary to mercury." "Its operation alone cannot, however, be relied on for certainty, and, as it frequently fails, it is little employed; while nitric acid still continues to be used, with the views already stated."

"The dose in which the oxy-muriate of potassa has been given is ten grains, three or four times a day, and increased gradually to twenty or twenty-five grains."—(*See Murray's Materia Medica, article "Potassæ Oxy-Murias."*)

SWEDIAUR says of this article—"*Virtutes:* oxygenans; motum systematis arteriosi augens." "*Usus:* asthenia; scorbutus; cachexiæ; hepatitis-chronica; syphilis? morbi cutis?" "*Doses:* grana xv.—lx. de die."—(*See Swediaur's Materia Medica, article "Murias Hyper-Oxygenatus Potassæ."*)

COXE, in his Dispensatory, copies DUNCAN verbatim; and GRAY, in his Supplement to the Pharmacopœias, says—"Stimulant gr. i.—ij.," which is also copied by COXE.

Briefly stated, the sum of all these accounts is, that this salt *oxygenizes the system, is antisyphilitic, antiscorbutic, antipsoraic, diuretic, febrifuge, antispasmodic,* and *general stimulant.*

With these notions, therefore, I first entered upon the use of this salt in my medical practice, beginning with it in spasmodic affections, such as hysterica—next using it in cutaneous diseases, more particularly psoriasis and impetigo—afterwards in syphilis, and finally in the secondary and latter stages of moderately atonic continuous fevers; but, in all these cases, without any perceptible effects of any sort, except a slight increase of the urinary excretion, altogether too inconsiderable to be of any utility in the treatment of any disease. It is to be remarked, however, that my doses never exceeded half a drachm, four times a day. I now discontinued its employment for some time, but was again induced to use it from the following circumstances. One day, while reading MURRAY's doctrine, that "substances containing a large proportion of oxygen, especially in a loose state of combination," are refrigerants—i. e., according to MURRAY, "such medicines as diminish the force of the circulation"—it occurred to me, that this article might be a pure antiphlogistic remedy, instead of a stimulant. Thus, if the refrigerants operate by imparting oxygen to the system, those articles which contain the most oxygen, and part with it the easiest, are the most powerful refrigerants. Now, as this salt contains as large a quantity of oxygen as any known medicinal substance, and as it parts with it even more easily than any other, it ought to be the most powerful refrigerant, or antiphlogistic agent, which we possess. I resolved to verify or disprove this, the first opportunity; and accordingly, in the first supposed phlogistic disease which came under my care, I entered, after bleeding, upon its use, with the utmost caution and circumspection, much as I suppose our predecessors first tried the cool regimen in the smallpox. Not, however, perceiving any effect from small doses, I soon increased to the quantity of a drachm, four times in the twenty-four hours, and with the certainty that it did not aggravate a single symptom; but, as I thought, it abated, in a moderate degree, all the symptoms of the disease. In these doses, and with these periods of repetition, however, it seemed to be inferior to the nitrate of potassa, in the doses, and with the periods of repetition, with which I had been accustomed to use that article. Partly, therefore, from this circumstance, and partly from its scarcity and cost, but more especially from the disappearance of all phlogistic diseases from the sphere of my practice, I soon entirely discontinued the medicinal use of this salt.

A few years afterwards, during the prevalence of an epidemic typhus where I resided, this salt was highly recommended to me, as an antemetic, by a professional gentleman in whose opinion I reposed great confidence. It was of course particularly recommended as an effectual remedy for the irritability of the stomach, with troublesome nausea and vomiting, which attended some of my cases of the epidemic typhus above mentioned. I accordingly made fair trial of it in these cases, both in doses of two or three grains and in doses of half a drachm, as well as in various intermediate doses; but, so far as I could judge, without any benefit from it in any case, and, in those in which I employed the largest quantities, with a decided aggravation of the very symptoms which it was expected to relieve.

This salt was again abandoned, as a remedial agent, till a few years afterwards, when it was again tried, in a few cases, for the purpose of relieving the nausea and vomiting attendant upon some instances of a low, malignant typhus. Here it could not be given in any quantity sufficient to produce perceptible effects, without aggravation of these very symptoms; and such had been previously ascertained to be the fact with all pure antiphlogistic agents in similar cases of this disease, particularly vegetable acids, neutro-saline effervescing mixtures, and the refrigerant salts generally.

From that time till within a few years, I neither used nor scarcely thought of this salt. Recently, however, knowing of its recommendation and employment in certain neuralgic cases (though, as far as I have obtained accurate information, without any certain benefit), my attention has again been called to its medicinal powers; and, in consequence of an application from a medical student, that I would suggest an article of the materia medica, as a subject of experiment, for the purpose of a dissertation inaugural to the degree of M.D., I named this agent. The experiments were all made in my office, and under my immediate superintendence; and, indeed, I was myself one of the subjects of them.

EXPERIMENT I.—January 7, 1832, E. J. D., in perfect health, and of ordinary susceptibility to the impression of medicine, but with his pulse at 96 in a minute (which was an accidental increase of about 24 beats), took, at three o'clock, P. M., a scruple of this salt. In half an hour the pulse was reduced in frequency to 80, and in an hour to 68, which was about four beats less than natural. No other effects were perceived.

EXP. II.—January 11, at seven o'clock, P. M., pulse at 72, its natural state, a drachm of this salt was taken. There was no subsequent effect, either upon the pulse or any other function, and no change whatever in any sensation.

EXP. III.—January 16, at seven o'clock, P. M., pulse at 76, half an ounce of the salt was taken; but it produced no effect subsequently, except a considerable diminution of appetite, and much flatulence, for several days.

Exp. IV.—January 21, at 4 o'clock, P. M., pulse at 80, an ounce of the salt was taken. In an hour, the pulse was reduced in frequency to 64. In another hour, the pulse was found varying from 56 to 65, a little exertion or motion instantly raising it to the latter number, and quiet for a sufficient time reducing it to the former. It was at the same time considerably smaller and weaker. In another hour—i. e., at seven o'clock, P. M.—the pulse, as respects strength and fulness, remained stationary, but its medium frequency was 64. At eight o'clock, the pulse remained as at seven. Shortly after this last dose of the salt was taken, a sensation of weight, fulness, and distention, in the epigastric region, began to be felt, which regularly and gradually increased, and was attended with a sensation of twisting, till about ten o'clock, P. M., when it had become so inconvenient, that about two fluid ounces of French brandy were taken, which, as was expected, greatly relieved it. Through the whole afternoon there had been also a very troublesome degree of flatulence, which increased with the other symptoms, and continued after they were relieved. There was likewise a moderate degree of cardialgia. Sleep, the night following, was much as usual; but, on the succeeding day (Sunday), there was a recurrence of the load and distension in the epigastrium, and of the sensation of twisting, which now amounted to rather severe pain, but which subsided, without medication, toward night. On the next day still following (Monday), these symptoms again recurred, and to such a degree as in fact to require medical relief. In the course of Tuesday, the same symptoms still continuing, three doses of opium, of a grain each, were taken at different times, with the desired effect, viz., the production of relief. On Wednesday, one grain of opium proved sufficient, and subsequently no more was taken, though much flatulence, and, at times, considerable uneasiness in the epigastrium, with deficiency of appetite, continued through the week. Indeed, whenever food was taken, even in very moderate quantity, it had a strong tendency to produce disturbance and distress; and, for several weeks following, the subject of these experiments had proetica marisca, which he had never experienced before. It should have been before stated, that, in the course of the afternoon and night after the last dose of the salt was taken, there was a considerable increase of the urinary discharge, which was at an end the next morning.

Exp. V.—January 7, 1832, at three o'clock, P. M., W. N. B., in perfect health, and of ordinary susceptibility to the impression of medicine, with his pulse at 72 in a minute, and slightly irregular (which is its natural state), took a scruple of this salt. This dose produced no perceptible change in the sensations, no change in the pulse, and no change in the state or condition of any of the functions.

Exp. VI.—January 11, at seven o'clock, P. M., pulse at 72, in other respects natural, a drachm of the salt was taken. No effect of any sort was subsequently perceived from this date.

Exp. VII.—January 16, at seven o'clock, P. M., pulse at 76, but perfectly natural in other respects, half an ounce of this salt was taken. In half an hour, no effect was produced; but, an hour or two subsequently, the pulse was evidently diminished considerably in force, and also reduced about ten beats in frequency. In the course of the evening and night following, there was an obvious increase of urine, but no other perceptible effect. The sleep was perfectly natural, so far as was noticed. On the morning of the day following (January 17), a strong sense of weight and distension was perceived in the region of the stomach, with deficiency of appetite, and flatulence. These symptoms continued, in a variable and fluctuating degree, through the 18th and 19th, so that animal food could not well be taken. On the 20th, they were so much mitigated as to admit of a dinner of meat; but they had not entirely disappeared on the 21st, when the eighth experiment was made.

Exp. VIII.—January 21, at four o'clock, P. M., the pulse at 72, and in other respects natural, an ounce of the salt was taken. In an hour, the pulse was reduced in frequency to 56 in a minute, and was considerably smaller and weaker than natural. In another hour (six o'clock, P. M.), the pulse was still 56, when perfectly quiet, but, by a little exertion and motion, it would rise to 64. In other respects, it remained as at the last hour. At seven o'clock, the pulse was still at 56, and the same in other respects. At eight o'clock, the pulse was only 48 in a minute, and was even still smaller and weaker. In the course of the last hour there was a copious alvine evacuation, which resembled the operation of a full dose of a refrigerant purging salt. It is to be observed, that during the same day there had been the customary natural evacuation from the intestines. Between eight and nine o'clock, walked about an eighth of a mile, and immediately, on returning, felt a severe, heavy, and oppressive pain, and a sense of sinking in the stomach, so urgent as to require speedy mitigation. At this time, the pulse was only 36 in a minute, and there was moderate sweating. Now took two fluid ounces of undiluted French brandy, which gave immediate relief, that continued through the night, during which the sleep was quiet. On the morning of the 22d, a sense of weight, with some pain, was again felt in the region of the stomach, for which an ounce of undiluted French brandy was taken, with immediate benefit; and, apparently in consequence of this, the appetite for breakfast was much as usual, and the customary quantity and kind of food was accordingly taken. But soon after breakfast the same symptoms began to return, and they gradually increased till about eleven o'clock, A. M., when they had become so severe as again to require medical relief. At this time, about a grain of opium was taken, which was productive only of moderate and temporary respite; for after no very long time the same sense of weight and distension in the stomach, and the same pain, were again urgent. At twelve o'clock, M., half a tumbler of wine was taken, with as much relief as to allow of the ordinary dinner, though, as there was considerable thirst, an unusual quantity of water was taken with it. Before long, however, the old symptoms returned, and they soon increased to such a degree, that a dose of opium, about twice the size of the last, was taken, but without any appreciable abatement of the complaint. By two o'clock, P. M., the morbid symptoms had become so urgent, that it was deemed necessary to call on the professional gentleman who superintended the experiments. The exertion and motion of walking about three fourths of a mile, to his house, very greatly aggravated the distress and pain. It had now extended to the umbilical region, had become lancinating, and extremely severe, resembling neuralgia, and there was tumefaction, hardness, soreness, and intolerance even of the lightest pressure, in both the epigastric and umbilical regions, with inability to sit erect—the whole accompanied with much flatulence, and frequent eructations of air. A free use of opium was immediately entered upon, which soon produced some benefit; but perfect relief was not obtained till about five o'clock, P. M., when full twenty grains of the remedy, accompanied with a little essential oil of cinnamon, had been taken. After this period, when perfect rest was maintained, there was complete freedom from pain; and the tumefaction, hardness, and intolerance of pressure, rapidly disappeared. Exertion and motion, however, would produce a slight return of the pain, but in a trifling degree. About nine o'clock, P. M., a moderate paroxysm of vomiting took place, by which, to all appearance, the food taken at noon, and probably considerable of the water which was swallowed with it, were rejected in a partially digested state. Not very long after this, went to bed, and had a perfectly quiet and comfortable night's rest, and on awaking, on the morning of the twenty-third, felt entirely well. On getting up and dressing, however, experienced some vertigo, but not sufficient to prevent walking three fourths of a mile to lodgings. On arrival there, again felt vertigo, and lay down on a bed. After a little rest, felt completely recovered, and at dinner had a good appetite, though indulged it moderately. At supper time, was so well as to crave and take animal food, after which, spent the evening in study and writing. No trace of indisposition of any sort was perceived the ensuing week. It is worthy of remark, that though there was no alvine evacuation on the twenty-third, yet that, early on the twenty-fourth, a natural one took place, and there was no subsequent derangement of this function.

Exp. IX.—January 7, 1832, at three o'clock, P. M., a professional gentleman, in perfect health, and of ordinary susceptibility to the impression of medicine, took a scruple of this salt. At the time the salt was taken, his pulse was at 72, and perfectly natural in every respect. This dose produced no change whatever in the pulse, though it was repeatedly examined at various intervals; and none took place in the sensations, or in the excretions.

Exp. X.—January 11, at seven o'clock, P. M., pulse at 72, a drachm of the salt was taken. At no time subsequently was there any change in the pulse, sensations, or excretions, that could possibly be attributed to the salt.

Exp. XI.—January 16, at seven o'clock, P. M., pulse at 76, half an ounce of the salt was taken. No effect was subsequently produced upon the pulse, except, perhaps, a moderate diminution in force and fulness, though this was so inconsiderable as to leave a doubt whether the salt had any instrumentality in the change. Other effects, however, were obvious. Within an hour from the swallowing of the salt, a sensation of weight and oppression in the stomach, almost amounting to pain, commenced, and this was accompanied with slight, but constant cardialgia, and considerable flatulence. During the night, the urinary excretion was nearly doubled, and the symptoms just described were increased so much as nearly to prevent sleep. The day following, the same sense of weight or oppression at the stomach continued, but in a diminished degree; the cardialgia disappeared, but the flatulence was rather augmented. The appetite was much diminished, and there was torpor of the intestines, indicated by costiveness, which was immediately attended with a moderate degree of proetica marisca, with which the subject of the experiments had previously been but rarely affected. It was at least three days before the stomach and alvine canal recovered their wonted condition, and even then a slight degree of proetica marisca remained.

Exp. XII.—January 21, at four o'clock, P. M., pulse at 72, an ounce of this salt was taken. Under the influence of this dose, there was no subsequent change in the frequency of the pulse, but there was an obvious and unequivocal diminution, both in its fulness and force, commencing within an hour, and continuing through the evening and night. The same sensation of weight and oppression, that has been previously described, also took place within an hour, but in a considerably greater degree than before; and it was likewise accompanied with more cardialgia, and more flatulence. In the course of the evening, and about three hours from taking the salt, the sensation of weight and oppression, in the region of the stomach, increased to a steady and uniform gravative pain, which at last became so urgent, that a grain of opium was taken. Just about the time the opium was taken, there was nausea, and four or five efforts to vomit, though nothing but air was ejected. During the evening, there was frequent micturition, and a discharge of nearly double the quantity of urine, with considerable of that sort of irritation about the bladder and urethra, which the subject of the experiment distinctly recollects having formerly experienced, not only from nitrate of potassa, but also several times from the carbonate of potassa, when he has used it freely. The grain of opium, in the course of about an hour, much relieved the immediate urgency of the pain in the stomach, but did not by any means remove it. As in each previous experiment the salt had been taken upon an empty stomach, so in this all supper was omitted till between nine and ten o'clock, P. M., when half a dozen wine biscuit, with about two fluid ounces of brandy, diluted with water, were taken. The brandy was used because the gastric distress had again amounted to so much pain as to require some mitigation, which it gave, in about an equal degree with the grain of opium that had been previously taken. Between ten and eleven o'clock, P. M., the subject of this experiment went to bed, but was unable to sleep for several hours, on account of the flatulence and the gastric distress. About midnight, the same sort of pain in the stomach, as above described, had increased to such a degree as again to require relief, and there was likewise a strong sensation of weight and tension in the umbilical region, with considerable pain, much resembling the commencement of colica ileus, or common colic. At this juncture, two and a half grains of opium were taken, which, in the course of an hour, reduced the symptoms, in the epigastric and umbilical regions, to the sensation of load and oppression, which had not disappeared since their commencement. From about two o'clock to six, A. M., the subject of this experiment slept well, but then awoke with the same sensations about the stomach and abdomen. At breakfast, had little or no appetite, but, nevertheless, ate moderately. For three or four days subsequently, it was necessary to take about three or four half-grain doses of opium daily, because, without, there would be a return of flatulence, sense of distension, oppressive weight, and even considerable pain, both in the epigastric and umbilical regions, and this to quite an inconvenient extent. Even to the end of the week, more or less of the same symptoms would constantly occur, unless subdued by a little opium; and during the whole of this time, there was deficiency of appetite, except when under the influence of a moderate quantity of opium. It is worthy of remark, that although no costiveness followed this last dose of the salt, and none was produced by the little opium which was taken, yet a troublesome degree of proetica marisca took place immediately, and had not subsided by the first of February. The fæces were lighter colored than natural during this period. It is also worthy of remark, in this case, that neither the opium nor the brandy produced any of the ordinary operative effects that might have been expected, had they been taken by a person perfectly well, and not under the influence of any other medicinal agent. The subject of this experiment well knows, from repeated trials formerly made, that he could not have taken three and a half grains of opium, in the manner which he did at first, without vertigo, headache, nausea, etc. the next day, unless where there was disease, for the relief of which, the force of the opium should be spent; or where some counteracting agent to the effects of opium had possession of the system. It may be necessary to mention here, that the weight employed for the doses of this salt was Troy weight, and not Avoirdupoise, which latter, I believe, is generally used by druggists, in many parts of our country, for all quantities above two drachms.

These details are taken verbatim from the dissertation of which they are a part.

It is believed that these twelve experiments, made upon three different individuals, with a successive increase of the doses, the same doses being given to each individual respectively, will be considered as throwing all the light upon the operation of this article, in single full doses, that can be obtained with safety, upon persons in health; and that the effects of single full doses fairly show its analogy to other better known articles of medicine, by which we can readily arrive at highly probable conclusions, in regard to its effects when given in small doses, at regular and short intervals, and its use persevered in for a considerable time. It will be obvious, that it could not well be taken in this latter way by persons in health. I believe I may add, too, that a correct judgment may be formed as to the *sort* of effects which this article will produce in disease, from its operation in health, though the *degree* of effect in different diseases cannot be thus estimated. In diseases attended with a morbid increase of susceptibility to the impression of medicines of this sort, far less may prove operative; while in diseases of an opposite character, in this respect, far more may be required: but it certainly appears to belong to a class of agents, whose effects, both in health and in disease, agree at least in kind.

Some further remarks on these experiments, will form a paper in the next number of this Journal.

REMARKS ON CONTAGION.

Communicated for the Boston Medical and Surgical Journal.

With the ultra non-contagionists, there is a course of abstract reasoning on which they place much reliance, though to my view it is fallacious in the extreme, and utterly untenable, both in the medical and in the physical world. It is roundly asserted that a particular, *specific effect*, can only be produced by the same *identical cause.* This I utterly deny, the alleged authority of the great Bacon to the contrary notwithstanding. Without noticing all the quibbles concerning the various acceptations of the word *cause*, I will remark, that it is one of the most common laws of nature that a *specific effect*, in different instances, is liable to be produced by an idefinite variety of *occasional causes.* What are more numerous than the causes of death ? Combustion may be caused by the communication of flame, of a spark, by friction, by sudden condensation of air, by sulphuric acid, by some kinds of fermentation, &c. Inflammation may be caused by fire, by frost, by mineral acids, and by various other means. The causes of fever are indefinitely numerous. The same will apply to other diseases of almost every description. I have no disposition to deny, that yellow fever, typhus, scarlatina, &c. are often, perhaps most frequently, generated in the localities in which they commit their greatest ravages ; but a man must be possessed of a very peculiar mind, who, judging from the evidence before the public, can deny the importation of cholera into Quebec and Montreal.

The dogmas of the ultra contagionists are equally absurd, and are virtually founded upon the same course of false reasoning—the identity of cause. They seem to suppose that disease is an existence of the same kind as an animal or a plant ; whereas, it is only a state or condition of existence. In the language of the schools, disease is a *mode*, not a *substance.* All the arguments, therefore, which are derived from the same chain of reasoning, as that opposed to the doctrine of equivocal generation in plants and animals, are inapplicable to the origin of disease.

It is easy to find the extremes, but it is difficult, if not impossible, to fix the dividing line between contagious and miasmatic diseases. Smallpox is at one end, and intermittent at the other. These two complaints appear to be governed by totally different laws, as to their origin, and the usual modes of their continuation and propagation. Perhaps the principal and most obvious difference is, that in smallpox, contagion is generally both a predisposing and exciting cause at the same time ; or, more correctly, there is needed no greater predisposition than ordinary susceptibility, to enable contagion to produce the disease. In intermittent, as a general rule, miasm does nothing more than act as a predisposing cause, putting the system into such a state that almost any error in the non-naturals will excite the disease. There are exceptions, undoubtedly, since the seeds of contagion occasionally lie dormant for a long time, and perhaps at times become extinct without any apparent effect; and miasm may be so concentrated, that remaining a night, or even a few hours, within its sphere, is almost certain to produce intermittent within a definite time.

The temperament of individuals has a vast influence upon their relative susceptibilities, when they are exposed to the causes of disease. But there are times and seasons, in which there are great variations of susceptibility, not only in individuals, but in whole communities. This is called *epidemic constitution*. When this constitution is very strong, epidemics are inclined to spread rapidly and widely, and almost every complaint becomes tinged with the prevailing malady. The general opinion, since the days of Hippocrates, is, that this constitution, or general predisposition, is owing to the state of the atmosphere. If by condition of the *atmosphere* is only meant a change or state of one or more of the elements with which we are surrounded, it is undoubtedly correct; but if the term is restricted to *air*, it is evidently without foundation. Nothing which can be detected by the barometer, thermometer, hyrometer, eudiometer, or by any other instrument or apparatus, is sufficient to account for epidemic constitution, or to show why one side of a river may be healthy and another sickly. Nor do the variations in the seasons afford a more satisfactory solution. Pestilential diseases, of wide difference, such as plague and cholera, for aught we know, may prevail in every month of the year, and in every habitable spot on the globe.

It will be observed, that these remarks are confined to *epidemics*; the local causes of *endemics* are not now under consideration. Nor are the causes of increasing the virulence of epidemics taken into the account.

Of all the hypotheses which have been started, that which supposes epidemic constitution to be occasioned by an invisible and imponderable fluid, analogous to caloric or electricity, is the most ingenious, and supported by the greatest weight of probability. A very respectable practitioner compares this state of predisposition to a cloud, hanging over one region for a time, and then visiting another; occasionally letting through the rays of the sun in some places, which remain salubrious, with pestilence around them.*

S.

PUBLIC MEDICAL INFORMATION.

Communicated for the Boston Medical and Surgical Journal.

About fifty years ago, Dr. Jared Potter, though residing in a small village, was decidedly at the head of his profession in Connecticut. An epidemic occurred among children, in which he soon discovered that the warm bath was of eminent service. This information he diffused among his employers, and he was rarely called to a patient without finding a sufficient quantity of hot water, and all the apparatus for bathing, at his hand.

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* The author of the above Communication will excuse us for changing his signature, as that he appended to his paper might lead to some confusion in our arrangements.—Ed.

When the spotted fever (so called) prevailed in the county of Litchfield, Connecticut, upwards of twenty years ago, Dr. North (now of New London), profiting by the suggestions of a Mrs. Hulbert, a woman whose name ought always to be mentioned with respect and gratitude, made known to the public that free perspiration, produced by the application of external heat, and the internal use of hot cordial drinks, when employed early, in general would essentially mitigate the symptoms of that formidable disease. While the physicians of her vicinity were losing, *secundum artem*, a third of their patients, under bleeding, vomiting, and purging, Mrs. Hulbert, of herself, cured her family by diaphoretics and cordials. This discovery was invaluable, and probably saved the lives of hundreds. After the people had been taught what to do before the arrival of the physician, and the practitioners had become familiar with the proper treatment, the disease soon lost most of its terrors.

It is the privilege of Americans to think and act for themselves, and our nurses, attendants on the sick, and heads of families, all know something of the management of common diseases, and are in the habit of using more or less medicine; and they frequently cure many light complaints, and know how to meet particular symptoms, without *direct* professional advice. This habit of thinking and acting, with regard to sickness as well as other subjects, in case of the sudden appearance of cholera will unquestionably be of great service. When a person is violently seized with gastric sinking, pain, agues, shrunken extremities, spasms, numbness, faintness, sunken countenance, leaden color of the skin, exhausting vomiting and purging, and other symptoms that threaten the immediate extinction of life, common sense and common observation will generally suggest to our citizens what is necessary to be done.

The patient is to be warmed by blankets, heated bricks, hot flatirons, bottles of hot water, blocks of wood or bits of board heated in boiling water, bags of heated sand,* &c., till free sweating is produced. In some parts of the country, bags of boiled oats, on account of their diffusing a pleasant steam, or bunches of hemlock or pine twigs, heated in boiling water, are preferred. The benumbed and pained parts of the body, and the extremities, are covered with strong mustard paste, or with *bats* of cotton freely sprinkled with pulverised capsicum. Laudanum, peppermint, brandy, and other cordials, are given internally, as freely as the stomach will bear.

In those parts of the country where cold, malignant diseases have frequently prevailed, these processes are now well understood by the people in general, and the physician, on his arrival, is gratified to find that the severest symptoms are already mitigated. Indeed, in many cases he has little more to do than to follow the same measures in a systematic manner, proportioned to the exigencies of the case.

It is owing to this kind of knowledge among the people of New London, that their late disease, so nearly resembling the cholera, has been attended with very little mortality. If the public prints, and the physicians in general, will diffuse the same kind of information *in our cities, and in those parts of the country where cold, sinking diseases, have*

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* Or ashes, which is preferable, as being generally in readiness.—Ed.

not already taught the proper treatment, the people will not be taken by surprise, should cholera appear.

The board of physicians in Boston have set a very humane and laudable example, in giving some of the most valuable information to the public. It is to be wished, that this report may be published in every paper, and be read by every family, in the country. We must look at home for rules of managing cholera, if we expect any success. The faculties of London and Paris, since they lose from a third to a half of their patients, it is obvious, are of no authority, and their reports are of no other service than as beacons, by which we may see and avoid their errors.

The non-professional part of our community, when our country is threatened with sickness, will read and judge for themselves. They will also act for themselves. We have no class of people so ignorant and debased as to be incapable of learning the outline of the treatment of any formidable disease, at least so far as to make them familiar with the process of nursing, and of mitigating casual symptoms. The examples given of Dr. Potter and Dr. North, with scores of others that might be noticed, are ample proof of this point. And should New England be visited with cholera, there can be very little doubt that the plain but able report of the medical board of Boston will be found to be the means of preserving hundreds, perhaps thousands, of our citizens.

It is sincerely to be hoped that no sectional feelings, and no rivalry of medical institutions in the other states, will prevent the diffusion and adoption of a plan of treatment, because it has been discovered and successfully practised in another part of the country. *Negative* experience, and abstract reasoning from favorite hypotheses, are of no weight in opposition to the *positive* testimony of such men as Page, Vaughan, North, and twenty others whose names might be mentioned, who have been in the habit of successfully combating every symptom which is commonly met with in cholera. The extent to which opium, alcohol, capsicum, and various other remedies, may be safely carried, in many painful, cold, torpid affections, is no where to be learned in foreign books. Here European knowledge and experience are very defective, as is evident from all the reports concerning the practice in cholera. After reading much upon the subject, the present writer can confidently assert, that he has not, in a single instance, found a report of practice in cholera sufficiently energetic for a moderate case of sinking typhus. Were we to employ as desultory and inefficient medication, in many of our cold and sinking epidemics, as that which is considered as the boldest practice in Europe, we should undoubtedly lose a third or a half of our patients. T.

3. What are the post mortem appearances in patients dying of Cholera ?

4. Is Spasmodic Cholera a new disease ?

The Committee conclude, and we think rightly, that in comparing the Asiatic disease, as described with cholera as known to us, the two appear essentially the same ; but that the Indian disease is distinguished as an epidemic by its extensive prevalence, by the violence and intensity of its symptoms, by the rapidity of its course, and by its fatality. There is sufficient evidence that the European and Asiatic disease are identical.

5. What is the proximate cause of Spasmodic Cholera ?

The Committee regard the disease as acting like a poison on the constitution, producing depression of the vital powers, such as ordinarily to prevent reaction. The spasms which mark the disease, may be regarded as an indication of the prostration of the muscular forces, and are similar in their character to those which ensue on the powerful operation of antimonial medicine. At the same time that it produces this depression, the poison violently and suddenly stimulates the alimentary canal, and thus produces the evacuations. Other remarkable changes which occur in the system, are, the failure of the urinary and hepatic secretions ; and the dyscrasis of the blood, which loses in a degree its fluidity, and becomes darker than in health in all the vessels.

6. Diagnosis of Cholera.

7. Prognosis in Cholera.

8. Treatment.—The most important indication in the treatment of cholera, is to remove the obstacles which exist to the free action of the heart, and to excite this organ to vigorous and steady efforts. To fulfil this indication, it is not sufficient, in the opinion of the Committee, to employ stimulants. At the same time that the power of the organ is augmented, it is also desirable to diminish the amount of the mass on which it is to exert its action. By this consideration is suggested the propriety of bloodletting, and the utility of this measure they believe to be confirmed by experience. The testimony of the Indian Reports, viz. that of Bengal, by Mr. Jameson ; that of Madras, by Mr. Scott ; and that of Bombay, all go to show the efficacy of this remedy. Mr. Annesley and Mr. Bell also regard bloodletting as the most important part of the treatment. Emetics have likewise been employed to arouse the powers of the circulation, and in many instances with good effect. Other important indications are to quiet action and relieve pain in the stomach and bowels, and to promote the biliary secretion. The means of effecting these, and the general plan of treatment to be pursued, are detailed in the Report at considerable length, and will form to the practical physician one of the most interesting portions.

9. What measures should be used to prevent the introduction of Cholera into this country ?—Under this head, the Committee report a plan of quarantine regulations, based on the supposition that the disease always makes its appearance within seven days after it is communicated, and that no vessel ought to be detained, on board of which no disease has existed for ten days previous to her arrival. When disease actually exists, or has been present within this period, the vessel should be subjected to a rigid quarantine, and no communication whatever should be allowed with the shore till the period of danger has passed. No restrictions should be imposed on the landing of merchandize from a diseased port, with the single exception of the article of rags. Clothing which has been worn by the sick, ought to be subjected to the common modes of purification.—However judicious these precautions appear in themselves, and

however cautious the reasoning on which they are founded, it is evident that they have seldom been fully adopted with the rigor recommended by the Committee. At all events, that the disease has been propagated with a rapidity almost without example, and that in its progress it has sometimes at least appeared to be governed by the laws which usually regulate contagious epidemics, will hardly be disputed by a candid observer ; but whether it has been in strict conformity with these same laws, can be better proved when, after the subsidence of the existing excitement, all the facts in the case shall be accurately known, and fairly and impartially compared.

10. What measures ought to be taken in case the Spasmodic Cholera shall appear among us ?—With a mere statement of this query, in answer to which the Committee have anticipated most of the important measures of police which have recently been recommended and adopted, we shall close our notice of the Report. However deplorable the events which have rendered necessary the performance of this task, we shall all join in rejoicing that it has been so ably performed ; and whether the present scourge is destined to visit us or not, the information contained in the present work, and the philosophical views which it suggests, will not fail to have a permanent value in the eyes of the profession, to whom it is again recommended in the same terms in which we briefly noticed it the last week.

THE CHOLERA IN CANADA.

The cholera, we are happy to announce, is almost entirely subsided at Montreal and Quebec, though cases are occurring in the vicinity of those places. At the suggestion of Mr. Clay, the Senate of the United States has voted to request the President to appoint a day of general humiliation and prayer to Almighty God, that He may in His mercy avert from our country the Asiatic Scourge which is now traversing and devastating other countries ; and that should it be among the dispensations of His Providence to inflict this scourge upon our land, that it may please Him, in His mercy, so to ameliorate the infliction, as to render its effects less disastrous among us, than they have proved among the nations which it has heretofore visited.

The Governor of Maryland has designated THIS DAY for a similar purpose, in that State. Our sentiments on such a measure were expressed on page 93 of our last volume.

We are compelled, by want of room, to defer several valuable Communications.

Whole number of deaths in Boston for the week ending June 29, 26. Males, 15—Females, 11—Stillborn, 1.

Croup, 2—consumption, 6—scarlet fever, 3—convulsions, 1—dropsy, 2—rheumatic, 1—measles, 1—infantile, 2—drowned, 1—throat distemper, 1—intemperance, 1—unknown, 1—suicide, 1—typhus fever, 1—affection of the brain, 1.

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CHLORITE OF POTASSA.

On the Chlorite of Potassa. By William Tully, M.D. Prof. Mat. Med. and Therap. in Yale College.

[Concluded from p. 333.]

In my view, then, the operation of this salt, as manifested in the preceding experiments, plainly appears to be (in kind, but not in degree) precisely like the effects of nitrate of potassa. In several instances, in chronic diseases, that were nearly if not quite local (as, for example, in a case of stricture of the urethra, mistaken by the physician in attendance for lithia, and, what is quite as singular, treated by a free use of nitrate of potassa), I witnessed the effect of that salt continued for a long time in efficient quantities, but not in so large doses as to produce any immediate inconvenience. In several instances, also, I have known two or three drachms of it, and in one instance probably about four drachms, taken by mistake, and not subsequently discharged, either by vomiting or purging; so that I well know its effects. From these observations, I should judge that the salt which is the subject of this essay possesses between a quarter and a third of the medicinal activity of the nitrate of potassa.

Again: the operation of this salt appears also to be precisely similar (not only in kind, but even in degree) to the effects of the bi-carbonates of potassa and soda. My attention was first turned to the effects of these last salts by observing their operation upon certain individuals, in the form of the popular beverage called soda water, as it was prepared several years ago; and afterwards I made some experiments with one of them, in single full doses, or rather very large doses (upon myself), for the sake of obtaining further assurance that I labored under no mistake. The results of my observations and experiments, in regard to the bi-carbonates of potassa and soda, and the nitrate of potassa, have been as follows:—

When used in a large quantity at once, or within a short period, though short of the amount that will occasion what is called actual poisoning, each of these salts produces a soft and feeble pulse—great flatulence, and often cardialgia—uneasiness and strong sense of load and weight, or distension, in the epigastrium, gradually increasing to a steady pain, like the beginning of colica ileus, with intolerance of pressure, progressively extending to the umbilical region, and even to the whole abdomen, subsequently becoming extremely acute and lancinating, and then considerably resembling the pain of colica rhachialgia—the tumefaction and tenderness augmented in proportion to the severity and continuance of the pain, and sometimes attended at last with severe vomiting, and more or less spasms. This, it will be observed, is thus far identically the operation of the salt under consideration.

When used in much smaller, but still efficient quantities, for a considerable length of time, the nitrate of potassa (and also the bicarbonates of potassa and soda) produces general debility, frequent soft and feeble pulse, pale countenance, a brown crust about the teeth, a peculiar diminution of the tone of the stomach and intestines, great flatulence and often cardialgia, utter loss of appetite, often great diminution of digestive power, sometimes intolerance of most sorts of food, occasionally frequent vomiting, and sometimes diarrhœa. When the perfect identity of the effects of a single large dose of the salt of which we are treating, with the effects of a similar dose of these salts, is considered, no reasonable doubt can remain that it is also capable of producing this last described group of effects.

But, as I have already said, in the earlier part of my medical practice, I employed this salt considerably in various diseases; and, as I have likewise stated, I have continued to use it occasionally (though rarely) up to the present time. Now, in true phlogistic diseases, I repeat, I think I have certainly witnessed an obvious and palpable antiphlogistic or reducing effect, and I am confident I have never witnessed any other medicinal operation from it; for I do not consider the slight increase of the urinary excretion, which it produces, as being, in fact, a medicinal effect, since it is too inconsiderable to be of any use in the treatment of disease. As I have stated, I have formerly tried this salt, in moderate quantities, in various diseases of the nervous function; and occasionally, when I told my patient what I hoped it would accomplish, he sometimes flattered himself that it did operate slightly in this way; but this has never been at all obvious to me, and even the patient has generally had some doubts of it. In other instances, where I did not explain the purpose for which I gave it, no effect has been perceived.

The tendency of this salt (when used to a certain degree of excess) to produce symptoms of colic and proctica marisca, though without cessation of the peristaltic action of the intestines, very strongly assimilates with all the unequivocally refrigerant salts, and even with the cathartic ones. In the eighth experiment, this article even seemed to prove cathartic, like the refrigerant salts; while, in the other experiments, it did not even produce a laxative effect; and yet, notwithstanding the purgation in the eighth experiment, which must have carried it out of the intestines, it operated, in other respects, much the most powerfully. Many practitioners, I doubt not, from the symptoms, would have considered further purging, rather than opium, as the appropriate remedy for the ill effects produced in this case. For myself, however, I entertain no doubt, from past observations in regard to nitrate of potassa, that purging merely would rather have aggravated than mitigated the evil.

It is my opinion, therefore, that, as respects medicinal powers, this article is a pure reducing, antiphlogistic, or refrigerant remedy; i. e. it directly reduces vital energy and strength of action in the arterial system, and of course relieves phlogistic diathesis. My colleague, Professor Ives, has formerly told me, that, according to his observations, this salt certainly diminishes the heat of the body. This corresponds perfectly with my observations in regard to its effects in the treatment of phlogistic diseases, and even in some cases where the heat has been purely irritative, not being connected either with entony (phlogistic diathesis) on the one hand, or any positive atony on the other. But I have not found it capable of abating all sorts of heat; for, in my early practice, I employed it somewhat in hot typhus, but rather with an aggravation than a mitigation either of the heat or any other morbid symptom. In this respect, it is perfectly analogous to nitrate of potassa.

I trust that it is unnecessary, at the present day, to show that the living human body cannot be oxygenised, like a piece of inanimate iron or copper, in the laboratory of a chemist; and, as it is now conceded that this salt is of no value in syphilis, it must be unnecessary to discuss its value in this point of view. If we search for proof of its efficacy in scurvy, I believe we shall fairly lose our labor, as I know of nothing upon the records of medicine that contributes at all to show this; and the same remarks appear to be equally applicable in regard to its powers in diseases of the skin, and also in spasmodic affections. That it has some diuretic powers, is certain; but these, as I have said, appear to be too trifling to be worthy of any consideration. It is, in my view, clearly febrifuge, but by no means in the same sense in which cinchona is febrifuge. Cinchona is febrifuge in intermittent and remittent, but not in cauma and the caumatoid phlogotica. Tartrate of antimony is febrifuge in cauma, but not in intermittent, or low malignant typhus. Now I think there is abundant reason to conclude that the febrifuge powers of this salt are in analogy with tartrate of antimony, and not with cinchona. It is to be regretted that physicians still continue to employ such vague terms as febrifuge, which scarcely convey any more precise knowledge, in regard to the particular virtues of a remedial agent, than the term medicinal. Under different circumstances, bleeding, antimony, nitrate of potassa, opium, cinchona, and alcohol, are all febrifuge. Now what other term is there, in the materia medica, that will comprehend a more heterogeneous group, so far as relates to their operation, and the cases to which they are adapted? I believe these observations are equally true of antemetics. What could possibly have been the origin of the opinion that this salt is a stimulant, I cannot imagine. When it was first introduced into the materia medica (as I have already stated), it was a prevailing theory, or rather hypothesis, that the refrigerants, or, in other words, antiphlogistics, were merely chemical, and not vital, in their operation, and that they produced their effects by supplying the system, through the medium of the digestive organs, with oxygen in a concrete state, thereby superseding the supposed necessity of its being received by the lungs, as was then believed, in a gaseous state, and, on its subsequent solidification, extricating the great quantity of combined heat, which was imagined to be instrumental in transforming it from a solid to a gaseous form. On this hypothesis, those articles which contained the greatest quantity of oxygen, in the loosest state of combination, ought to have been the most powerful refrigerant or antiphlogistic agents. Again: the salts with alkaline bases were supposed to be additionally refrigerant or antiphlogistic, by the "power they have of producing in the stomach a sensation of cold."* This article, then, being a salt of an alkali, and containing more oxygen, in a loose state of combination, than any other agent of the materia medica, ought to have been the most powerful refrigerant or antiphlogistic, instead of a stimulant. But if it is in fact refrigerant or antiphlogistic—i. e. if it possesses the power of directly reducing vital energy and strength of action in the arterial system—it cannot at the same time have a stimulant power; i. e. the power of producing a quickly-diffused and transient increase of vital energy and strength of action. It ought not to be forgot, in this connection, that this salt consists of six equivalents oxygen, one equivalent potassium, and one equivalent chlorine—and that nitrate of potassa consists also of six equivalents oxygen, one equivalent potassium, and one equivalent nitrogen; so that the two salts differ from each other only by one equivalent out of eight.

But MURRAY says, that, as a remedy, this salt may be classed with the nitric acid. Now I do not think that one single particular can be mentioned, in which it truly agrees with nitric acid. As far as has been ascertained, nitric acid is a moderate tonic and deobstruent, without any other powers, at least as an internal remedy; while this salt (according to my observations) would seem to be a pure refrigerant or antiphlogistic. I am aware that the mineral acids are commonly said to be refrigerants; but all those who call them refrigerant, call them tonic likewise. Now, if they are really tonic (of which I believe there is no doubt), how can they be refrigerant also? how can an individual article both increase vital energy and strength of action, and diminish vital energy and strength of action, at one and the same time? Is it not the fact, that, by the universal consent of the medical profession—a consent, doubtless, founded on experience—the mineral acids are considered inadmissible in truly phlogistic diathesis, and are thought useful only in atonic cases, which would not be the fact did they possess antiphlogistic, or, in other words, refrigerant powers?

Upon what ground, then, does MURRAY call this article tonic? The following would seem to have been his reasoning, viz.:—nitric acid is tonic; nitric acid imparts oxygen to the system; this salt also imparts oxygen to the system, therefore this salt is tonic: and so nitric acid and this salt are placed in immediate connection, in his classification of the materia medica; and nitrate of silver, all the mercurials, iron, zinc, copper, arsenic, bismuth, baryta, and lime, immediately precede nitric acid and this salt, in the same class, and in the order in which I have enumerated them. But whoever confides in such reasonings, as appear to be applied to this article by writers, will inevitably be misled. The powers of medicines, in all cases, must be ascertained by experiment or experience, and by actual observation of their use, and in operative quantities, too; and they cannot be ascertained in any other way. In the department of materia medica, "*no argument like matter of fact is.*"

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* Murray.

As I have placed the name *Chlorite of Potassa* at the head of this essay, it is necessary to make a few remarks, not only in explanation, but in justification, of the employment of a name not used in any of the common systems of chemistry. Chemical authors of the present period specify four compounds of chlorine and oxygen, the existence of all of which, I believe, is well established. The first is alleged to be composed of one equivalent of each of these elements, and it is denominated protoxyd of chlorine. In regard to the second, there has been a diversity of opinion. It is commonly said to consist of one equivalent of chlorine and four of oxygen, though the Count Von Stadion, one of its discoverers, supposed that it contained but three equivalents of oxygen. Under the former view, it has been called tetartoxyd of chlorine, and, under the latter, tritoxyd of chlorine. Dr. Thomson, in the first volume of the edition of his chemistry, which was published in 1831, considers it as a tetartoxyd; but, in the second volume of the same work, he says—"There can be but little doubt that Von Stadion's analysis is accurate, so that it is a compound of one atom chlorine, and three atoms oxygen." But he here considers it as an acid rather than an oxyd; and he says—"If it is placed in contact with an alkaline base, in its nascent state, a combination takes place, and a salt is formed, having a peculiar acrid taste, similar to that of the acid." He adds, that its "salts have the property of destroying vegetable colors." In the latter part of the same volume, where Dr. Thomson treats expressly of all the salts, he makes no mention of any salts of this supposed acid; but, from reference to his remarks upon what is called *Bleaching Powder*, and upon what is called the *Disinfecting Liquid of Labarraque*, under the article Calcium, in his first volume, we find that he imagines that a part of these compounds constitute his supposed salts of this supposed acid, as he there tells us that Berzelius considers the *Bleaching Powder* as a mixture of three atoms chlorid of calcium, with one atom of a salt of lime containing this supposed acid. Now, that Berzelius's view of the composition of the *Bleaching Powder* is not correct (though the elements of the compound will admit of it), is proved by the facts, that, when a strong acid is poured upon it, chlorine is extricated, which is not the operation of such an acid, either upon chlorid of calcium, or any salt of the oxyd of calcium, with an oxygen acid; and that it is not sufficiently deliquiating, when exposed to atmospheric air, to admit of its being three fourths chlorid of calcium, which is one of the most deliquiating compounds known. The acid character of the tritoxyd of chlorine does not, therefore, appear to me to be rendered at all probable. Of the two other compounds of chlorine and oxygen, the next consists of one equivalent of chlorine and five of oxygen, and the last of one equivalent of chlorine and seven of oxygen; and both are decided and unequivocal acids. But in the systems of chemistry there is a singular anomaly in regard to the nomenclature of these two acids; for, contrary to all rule, that which contains the least oxygen is called chloric acid (instead of chlorous), and that which contains the most is called per-chloric acid. This application of names undoubtedly originated from the circumstance, that the acid containing the least oxygen was discovered first, and then, being the sole known acid of chlorine with oxygen, was very properly called chloric acid; but, when another acid of chlorine containing more oxygen was discovered, the name of the first known should have been changed to chlorous acid, and the new one should have been called chloric acid. Such a change has actually been made in regard to the acids of selenium: for that which contains the least oxygen was first discovered, and was then called selenic acid; but, when that containing a greater quantity of oxygen became known, the name selenous was applied to the former, and the name selenic transferred to the latter. The same is the fact with regard to the cyanic and cyanous acids, the former denomination having been applied to the latter acid when that only was known; but when another was discovered, containing more oxygen, a change of names, as in the case of the acids of selenium, was immediately made.

But there are other objections to the prevailing denominations of the acids of chlorine, beside mere anomaly of nomenclature. At the present time, the salts of the peroxyds are distinguished from the salts of the protoxyds by the prefix *per* to the name of the salt. Thus, a salt of the chloric acid, with the protoxyd of iron or the protoxyd of mercury, is a protochlorate; and a salt of the chloric acid, with the peroxyd of iron or the peroxyd of mercury, is a perchlorate. But upon the present received nomenclature of the acids of chlorine, we shall have three sorts of perchlorates, of different composition, the distinction of which, these names do not make. By the retention of the now existing nomenclature of the books, in regard to the acid compounds of chlorine and oxygen, we shall be obliged to have perchlorates whose bases are protoxyds, and also two entirely distinct sets of perchlorates whose bases are peroxyds; i. e. perchlorates formed of different acids. Besides, judging from analogy, we may yet expect to discover an acid of chlorine and oxygen, intermediate between the two now known, and consisting of one equivalent chlorine and six equivalents oxygen; and likewise another, intermediate between the tritoxyd of chlorine and what is now called chloric acid, and consisting of one equivalent chlorine and four equivalents oxygen. As the now known acids of chlorine are at present called, it would be difficult to find names for the two new ones of the above description, at least in analogy with the nomenclature of other acids; but only call the now known acids of chlorine by the names of chlorous and chloric acids, and one of the *anticipated* new ones would be a hypochloric, and the other a hypochlorous, acid, in strict analogy with other existing cases.

But another reason may perhaps be assigned by some for the existing nomenclature of the books for the acids under consideration, viz. the fact that the bromic, iodic, and nitric acids contain just five equivalents of oxygen to one equivalent of their respective bases. I can, however, see no reason why the number of equivalents of oxygen contained in these acids should be considered the maximum quantity that shall form an *ic* acid, any more than the number contained in any other *ic* acid. According to the last edition of Thomson's Chemistry, the manganesic acid contains four equivalents of oxygen; the columbic, the tungotic, the molybdic, the selenic, and the sulphuric, contain only three equivalents of oxygen; the chromic, the arsenic, and the phosphoric, contain only two and a half equivalents of oxygen; the antimonic, the titanic, the uranic, the boracic, and the carbonic acids, contain only two equivalents of oxygen; the oxalic contains only one and a half equivalent of oxygen, while the telluric and the silicic acids contain only one equivalent of this element. Why, then, should the quantity of oxygen contained in one of these groups of acids be considered as the standard of an *ic* acid, any more than the quantity contained in any other group? Why is it not probable, from the analogy of chlorine, that acids of bromine and iodine, containing seven equivalents of oxygen, will yet be discovered?

From these considerations, I feel myself warranted in calling that acid of chlorine, which contains five equivalents of oxygen, by the name of chlorous acid; and that which contains seven equivalents of oxygen, by the name of chloric acid, which, of course, makes the salt of which I am now treating a chlorite of potassa. In adopting this nomenclature, I cannot but think that I am only anticipating the books for a short time.

By way of recapitulation, I will again enumerate the compounds of chlorine and oxygen, with their respective representative numbers, viz.:

1st. Protoxyd of chlorine, which is composed of 1 chlorine 36+1 oxygen 8=44.

2d. Tritoxyd of chlorine—1 chlorine 36+3 oxygen 24=60.

3d. Chlorous acid (now called chloric acid)—1 chlorine 36+5 oxygen 40=76.

4th. Chloric acid (now called perchloric acid)—1 chlorine 36+7 oxygen 56=92.

It will be observed that there is still room for the discovery of a deutoxyd of chlorine, consisting of 1 chlorine 36+2 oxygen 16=42; a tetartoxyd of chlorine (or, more probably, hypochlorous acid), consisting of 1 chlorine 36+4 oxygen 32=68; and a hypochloric acid, consisting of 1 chlorine 36+6 oxygen 48=84.

I shall only add, that the chlorite of potassa is commonly prepared by transmitting chlorine gas through a concentrated solution of the protoxyd of potassium, until (as is commonly but incorrectly said) the alkali is completely neutralised, or, better, till it is either decomposed or combined, so that the solution has no alkalinity. The *rationale* of the formation of this salt, by this process, seems to be as follows:—the protoxyd of potassium consists of equal proportions of oxygen and metal. Now, if six proportions of this oxyd, and six of chlorine, are employed, five proportions of the chlorine are believed to unite with five proportions of the metal, forming five proportions of chlorid of potassium; and the five separated proportions of oxygen are believed to unite with the remaining single uncombined proportion of chlorine, forming one proportion of chlorous acid; and this single proportion of acid is believed to unite with the single remaining proportion of the oxyd, to form one proportion of chlorite of potassa; so that the product must always be five proportions of chlorid of potassium, to one proportion of chlorite of potassa, without any remainder of any sort. Why all the chlorine does not unite with all the metal, and extricate all the oxygen (since the chlorine and the metal are supposed to have a stronger affinity than the oxygen and the metal), I cannot pretend to tell; for, with all our knowledge on this subject, the science of chemistry still abounds with inexplicable things of this sort.

New Haven, June, 1832.

REMARKS ON FEVER.

Some Remarks on Fever, and on the Prize Essay of the New York State Medical Society for 1828. By Joseph Comstock, M.D.

[Communicated for the Boston Medical and Surgical Journal.]

It was a wise remark of the father of his country, that the best method to preserve peace is to be prepared for war. In accordance with this sentiment, we may observe, that the medical world, in a time of general health, should be prepared to meet pestilence. The multiplicity of discrepant views, the extensive introduction of new terms, and the immense number of new publications, require a discriminating and generalising genius, like that of the illustrious Boerhaave, to reject the useless and concentrate the useful—to fix facts on a firmer foundation, and to establish paramount principles; not a mere compiler, but one that is able to supply some *new* links in the medical chain, which, even in this day of light, are still lacking, as well as to unite others, which, although well formed, remain still unconnected. He must be an anatomist, a physiologist, a pharmaceutist, and thorough in therapeutics. He must have the especial power of potent reason and acute discrimination, that he may be able to sweep away those numerous pleasing—sometimes elevated, but still more often unsubstantial—fabrics, which but puzzle, perplex, and often lead into the mazes of error. His pioneers must be those who have given their attention to one class of diseases; to one tissue of anatomical structure, healthy and disorganised; to one set of physiological actions, natural and morbid, and to the peculiar effects of a single remedy.

Half a century is now hardly sufficient to establish a single new article of the materia medica, owing to the want of specific attention, the omission of minute observation, and the lack of concentration of time and talent upon one single article.

With everything relating to *fevers*, he must be familiar; for he who knows the whole of their phases, phenomena, and treatment, is the most accomplished and useful physician. They are, in fact, the most extensive, the most variegated, and the most eccentric, of human maladies. He who knows best how to describe, define, and discover them, mitigate them when incurable, cure them when curable, and prognosticate their terminations, has arrived the nearest to the acme of his profession, and will find little difficulty in managing all other systematic complaints.

Still, fever, at this late day, is a name without a specified identity—a disease without a definition. This is not owing to any want of investigation, but to the intrinsic difficulties attendant on the subject itself. These difficulties do not apply, however, to the defining of any one particular fever.

Among the Greeks, *fire* and *fever* were nearly of the same import. Πυρ, *ignis*, fire, and hence pyrexia, is employed by HIPPOCRATES himself, to signify fever. The views of the ancients are some of them handed down by tradition, from periods of antiquity more remote than any manuscript now in existence. The universal idea conveyed by the term *fever*, both to the learned and unlearned, is that of heat, or an increase of temperature. And yet to this phenomenon there are striking exceptions ; especially in fevers of the typhoid type, and their congeners. And such exceptions do not appear to have been unknown to HIPPOCRATES ; for proof of which, the very term *typhus* is one. So different were *some cases* of fever from their common burning *form*, and yet so fixed was the opinion of *heat* and *fire*, as belonging to all, that a term was used, signifying that there was *fire* still, but that it was latent, hidden, smothered, or covered. Hence the origin of the word *typhus*, as applied to fever ; the Greek word τυφω, as we are told by DR. GOOD, signifying "to smoulder, or to burn and smoke without vent." I know that some authors derive the term from τυφος, a noun, which means *stupor*. Stupor, to be sure, is sometimes a symptom of typhus ; but, like spots, and fainting, and delirium, not uniformly so. The authority for the former Greek word, and its propriety, are, therefore, both immensely in its favor.

But the idea that all fevers are *hot* is the traditional and popular *one*, and the world never gives up its first impressions. With the multitude, or, in the language of DR. RUSH, with "the great vulgar and little vulgar," *first* impressions are *last* impressions ; they are indelible. The idea, therefore, that all fevers are hot, is accompanied with others, viz. that all require cooling, and cathartics, and depletion. Where we find but few ideas, we always find those few very firmly riveted. Such is the case in this instance. Errors of some kinds may be few, but fatal. When typhus fever first became epidemic, in a certain district into which I was afterwards called, it was mistaken for worms. The attending physician gave cathartics of such kinds as are usual on such occasions. But such was the extreme debility of the little patients, that, when *these* began to operate, *they* began to die. It is believed that not one child lived who was subjected to this treatment. The destructive effects of the depleting mode of practice reached us from the navy, the army, and all parts of the United States. Previous to the invasion of typhus fever as an epidemy, and since its cessation, with the exception of sporadic or endemic cases, evacuations have been used, in the fevers of this country, with decided advantage. I well recollect a case of pneumonia, which ended in recovery, and which occurred about two years after the cessation of the typhoid epidemic. This case required no less than eleven bleedings, with other evacuations.[*]

On our accurate discrimination and correct diagnosis, sometimes hang life and death. It is highly interesting to the public, that accuracy should everywhere prevail ; but errors are most to be lamented when they emanate *from*, and prevail *in*, great states, great towns, and great minds. The state of New York—the first in our union in population, in the magnificence of its cities, in the fertility of its soil, and in the liberality and excellence of its institutions—should take the lead, also, in the correctness of its views. New York is the great source of reference and appeal in medical matters, at least in some sections of the union; and, as she is daily rising in glory, her influence and authority are daily increasing. How all-important, then, that SHE should be correct! At the head of her medical colleges, medical schools, medical societies, and medical professors, is *one*, called the STATE MEDICAL SOCIETY, holding its meetings in the capital city. Yet, so late as the year 1828, this society conferred its premium, for the best "ESSAY ON THE HISTORY, CAUSES, AND TREATMENT, OF TYPHUS FEVER," upon a writer who denies the animal origin of diseases, and the hurtful effects of putrefaction and filth in producing fevers!

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[*] This was an extraordinary case, originating, in a man, from a fall on the frozen ground, from a cart. I mention it as illustrative of the different states of the system, when typhoid diseases prevail and when they do not. During the reign of typhus, I saw two cases, both in men, who received bodily injuries less severe than this man, and both died with typhoid debility—the system, in neither case, never reacting at all!

So great a medical heresy was never promulgated from so high an authority. The whole medical world, HIPPOCRATES, GALEN, AARON OF ALEXANDRIA, RHAZES—all the names of celebrity, remote and recent—PRINGLE, CULLEN, CHISHOLM, WILSON, GOOD, and others, are thus set at nought! As to the history of typhus fever, we are informed, by him, that "the ancient authors on medicine make no particular mention of it" [p. 1]. According to this, HIPPOCRATES is not an ancient author; for he particularly mentions it, and from him the very name is derived.* Under the head of *Prognosis*, we are told that "the chief danger, not only in this, but in all fevers, arises from the disorganising effects of high and uncontrolled excitement," &c. [p. 7]. Will it be believed, by those who read this, that the writer ever saw a genuine case of typhus fever?

Of debility, he says—"This, then, is the case with the debility in the primary stages of typhus; it is increased by the exhibiting of stimulants, and lessened by evacuating measures" [p. 10]. Further, we are told [p. 11], that "every physician must have witnessed the positively strengthening effects of cathartics, in typhus fevers, before the constitution has been really debilitated by long-continued excitement."

A writer of this stamp, we may be assured, cannot get along without shedding much blood; accordingly [at p. 22], we have the following passage: he says—"We should draw blood *pleno rivo*, and not rest satisfied with a small dribbling stream; the first mode of bleeding is infinitely preferable to the last, as it effects a more speedy reduction of the pulse, and sooner brings on a state of fainting, which is much to be desired in very violent cases, as it is accompanied with vast relief to the inflamed organ." Will it be credited, that this sentence, which I have extracted entire, relates to the typhus fever of the United States, in which, "in very violent cases," the patient faints spontaneously, has a pale countenance, and a weak, tremulous, thread-like pulse, if any pulse at all? Yet such is the fact! The prize pamphlet lies before me, and I have compared my extract with every word and every letter of the original. This sentence has a note in the margin, from which I will extract three lines, in order to show the prize-writer's notion of typhus fever, and the disease by which he illustrates it. He says—"We have a striking example of the powerful effect of bleeding *ad deliquium*, or until a sensation of faintness or sickness is produced, in cases of violent ophthalmia."

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* See Latin translation of his works, by HALLER.

As adjuvants to bloodletting, DR. HAMILTON's purgative plan, and some pills of his own, formed of calomel, jalap, and aloes, are recommended. But, having discovered that cold bathing was debilitating, its aid is put in requisition, along with bloodletting and cathartics, to further reduce the pulse and prostrate the powers of life. Thus we are told [p. 37], that "these facts unquestionably prove that cold has none of the properties of a stimulant, since it weakens the pulse in a state of health, weakens it still more when already weak, as in a chill, and lessens very much its volume and frequency when in a state of excitement and fever."

As the writer does not allow cold to be a stimulant, he infers that it is a sedative, and says—"It is from its operating in this way, that we can readily account for its extraordinary effect in fever" [p. 38].

So intent is he on drawing blood in typhus, that, under the head of *Congestive Typhus*, which he considers the form putting on the greatest appearance of debility, he says—"If we cannot, however, procure blood from a vein, we must resort to arteriotomy" [p. 45]. We are told that "we are not to rely solely on bleeding, the bath, &c., in the cure of congestive fever. After bleeding," he says, "we should immediately order large stimulating enemata, that the bowels may, if possible, be at once evacuated, and then commence the use of cathartics." For this purpose, he again recommends calomel and jalap [p. 46].

Thus the twenty-fourth aphorism of HIPPOCRATES* is trodden under foot of men, as well as women!

It cannot indeed be discovered, by this essay, what the difference between typhus and inflammatory fever consists in. There is no attempt to define the former; and, as to the treatment, we have seen that it is wholly adapted to the most intense grade of the latter.

As the writer is at odds with the great and good of the medical world, he can hardly get through his pamphlet without being at odds with DR. MAGILL himself.† Having, in the anterior part of his essay, quoted the noted case of the fever at Oxford, in 1577, occasioned by the effluvia of a filthy prisoner, who was tried at the Black Assize, and who poisoned the court and spectators—and having referred to other similar instances at Exeter, Taunton, and the Old Bailey—*he*, in the latter part of his essay, adduces the opinions of DR. BANCROFT and himself, founded on the filthy manner of living of the Russian boors, the Greenlanders, the Esquimaux, the Samoides, &c., as triumphant proofs of the harmlessness of animal putrefaction and the eating of carrion! He ought to have called to remembrance the power of habit, which accounts for all these phenomena; and that Rowland Jenks, the criminal at the Black Assize, who poisoned the court and some five hundred others by the effluvia of his clothes and person, *was not himself affected.*

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* SECT. 1.—Women resorted to family physic, with very pernicious effects, in typhus fever.

† ALFRED T. MAGILL, M.D., of Winchester, Virginia, author of the Prize Essay. New York, 1829. CHARLES S. FRANCIS, 252 Broadway. pp. 69.

And now, once for all, we may with truth remark, that it is not one cause alone which produces fever. There is a predisposition to be affected in those who have fevers, and there is an idiosyncrasy to resist the most concentrated causes in those who escape. Hence, it was never known that the most *virulent virus* prostrated every single individual exposed to its influence. No; not even the plague, smallpox, or bite of a rabid animal. A predisposition to be acted on sometimes pervades a ship's crew, an army, a court, or a family. At other periods the majority escape, and one only, or a few, are attacked. In fact, an immunity is more common than an epidemic, although far less noticed. The pages of history record only battles, invasions, sieges, and massacres—sudden deaths, violent deaths, plagues, and epidemics. The times of peace, and plenty, and prosperity—of health, public and private, pass unheeded.

The plague of India, and the present pestilence of Europe, the *cholera*, is acknowledged to be a disease of the typhoid diathesis. It is treated by the celebrated MAGENDIE, at Paris, with hot wine and strong punch. It is, therefore, very important that typhoid diseases should be well studied, and their nature fully understood. He who thinks that he finds a typhus fever with a full, hard pulse, a tense fibre, and which requires repeated bleeding and drastic cathartics, is utterly mistaken. There never was, and never can be, any such a *typhus fever*. Neither ophthalmia, cephalitis, gastritis, nor carditis, are claimed to belong to its class, neither pneumonia* nor phrenitis to partake of its nature. If there is ever any inflammation attending typhus, it is of the erysipelatous kind, in which bleeding is death—*at least sometimes*. In a case of typhus fever, the most distinctly marked, with all the symptoms of complete debility, such as fainting when lying on the bed and on the back, the first attack was that of erysipelas in the face and forehead.

It would seem that every kind of fever has been called typhus by some indiscriminating writers. The author of the prize essay, speaking of the pulse, says, that "in some cases it is tense and hard." Now we deny the existence of such a pulse in typhus fever. It is known only by a soft, feeble, and easily compressible pulse, whether or not it be increased in frequency. In general, however, the pulse is very much accelerated, varying from one hundred and twelve to one hundred and forty in a minute. We apply the terms *typhus* and *typhoid* exclusively to diseases of direct debility. Cholera is undeniably a disease of this class; so are cynanche maligna and scarlet fever. Cynanche trachealis, or croup, on the contrary, is a disease of a contrary diathesis, the attending fever being inflammatory, or a *cauma*. The last case of this the present writer had, his little patient was saved by the very free extraction of blood by leeches applied to the throat, aided by emetics of ipecac., tartarised antimony, and lobelia.

These remarks on the prize pamphlet would not have been given the public, had not its doctrines been sanctioned by the high authority before mentioned, and been so utterly discrepant to our own views of the subject, founded on a large experience. They are made with a spirit of conviction of the danger of its doctrines, and not of hostility to any person or persons. The writer of it deserves the credit of wielding a potent and polished pen, which is fully conceded him.

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* Pneumonia typhoides is here, of course, excepted.

Lebanon, Ct., June, 1832.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, JULY 11, 1832.

CHOLERA AT NEW YORK.

After our last paper went to press, we had intelligence of the occurrence of several cases of cholera at New York. Its introduction into that city appears, so far as facts have come to light, to be wholly independent of contagion. How far its subsequent progress has been aided by this cause, we have no means of judging.

The Board of Health report every day, at 12 o'clock, the number of new cases and of deaths. On the 5th instant there were 20 cases and 11 deaths ; on the 6th, 30 cases and 19 deaths ; and on the 7th, 42 cases and 12 deaths. The progress and fatality of the disease, thus far, has been much less than could have been expected in a commercial city of 200,000 inhabitants.

At the suggestion of our City Council, the Consulting Physicians have designated Drs. Bigelow, Ware, and Flint, as a Medical Committee, to visit New York, and acquire and communicate knowledge of the disease as it there prevails. These gentlemen left the city on Sunday last, and are now engaged in the duties of their commission. The result of a deputation so wisely selected will be communicated, as soon as possible, to our readers. In the mean time, we offer below a letter from Dr. Paine, of New York, which contains some interesting details of the post mortem examination of two (and we believe the first two) cases of the disease that proved fatal in that city. The letter was addressed to a distinguished practitioner in this city, to whom we are indebted for the liberty of publishing it.

New York, July 3d, 1832.

Dear Sir,—The reports respecting the existence of cholera in this city are so contradictory, that you may be desirous of knowing the absolute truth ; but I am chiefly induced to make you this communication for the purpose of submitting to you the morbid appearances on dissecting two individuals who were supposed to have died of this disease, and the notes of which I took during the examination, which was conducted by Drs. Carroll and Ludlow, and myself.

The subject of the first case is the man who lived at the corner of Reed and Greenwich streets. I did not see him till about twenty minutes after death, and have derived my knowledge of his symptoms from his wife and his physician.

He was forty years of age, very robust and corpulent—pursuing the trade of pianoforte making—of intemperate habits, and had drank rather excessively on Sunday, the 1st instant, though was sober enough to accompany his wife to church in the evening. He had complained of a sense of tightness about the region of the stomach, for four or five days previously, but at no time of any pain in his head, before or during the disease. His appetite remained good till the noon of that day, when he ate moderately of fried fish and potatoes. Soon after his return from church, he retired to bed, remarking to his wife that he had an unusual commotion in his bowels, which occasionally interrupted his sleep till 12 o'clock, when he first suffered the attack of vomiting and purging, attended by great distress in the abdomen.

The house was immediately deserted by the other occupants, and no messenger could be obtained by his wife, to procure a physician, till five o'clock in the morning, at which time the patient was visited by Dr. Cameron. The doctor informs me that he found him violently affected with vomiting, purging, and most convulsive spasms; the features sunken and the eyes staring; the pulse insensible at the wrist, and the surface cold, and covered with a clammy sweat; the countenance black and terrific; tongue of a dark purple during the spasms, becoming opalescent as the spasmodic action abated; the fluid rejected was watery, consisting probably of the liquids he was permitted to drink; his dejections resembled rice water, of the consistence of cream. The faculties of his mind were unimpaired to the last, and, during the short intervals of ease, his muscular strength was not sensibly diminished. He passed no water after the arrival of the physician.

Small quantities of laudanum were administered, and the usual external applications made, with the effect of diminishing the symptoms generally for two or three hours, at which time reaction began to take place, and at ten o'clock he was bled to the extent of ten or twelve ounces. The symptoms, however, had been again increasing, and continued to become more violent till the time of his death, which took place about eleven o'clock, the patient having suffered about eleven hours.

The lividness disappeared from his skin about half an hour before death, and returned, particularly to the face, about an hour after death.

I first saw him about twenty or thirty minutes after he had expired. The features had recovered from their contraction, and, with the exception of the eye, presented no unusual aspect. But the eye was remarkably expressive of that influence which the disease has been supposed to exert on the nervous system, and its wild, glaring stare was startling to the spectator. It was looking forward, and was much exposed by the contraction of the eyelids.

The muscles of the body were rather rigid, and the surface very cold. Spasmodic contractions of the lower extremities were still taking place; and I am informed, by Dr. Cameron, that the legs continued to move occasionally for an hour and a half after his death. The tongue and inside of the lips exhibited a dead white, with a slight shade of blue. This color was independent of the coating, which did not exist to any remarkable extent. There were several livid patches on the thorax and shoulders.

The dissection was commenced in about an hour and three quarters after death. At this time the face had again become very livid, and the skin was discolored extensively in other parts. The eye retained its remarkable wildness, much of which was remaining four hours afterwards, when we finished the dissection. The muscles still slightly rigid, but no spasmodic motion could now be observed. The incision penetrated about three fourths of an inch of cutaneous fat, and I was surprised to find the muscles so florid in a case of so much obvious congestion.

On opening the abdomen, the stomach and large intestines appeared very much inflated—the small intestines only partially so. The stomach and small intestines were florid, denoting great vascularity of the internal coat. Large intestines natural. Mesentery and omentum loaded with fat. No turgescence of their veins, or of the veins of the diaphragm. No fluid in the cavity.

The stomach contained a pint of a fluid resembling a weak infusion of coffee. A bright redness existed in the upper portion of the stomach, occupying about one third of the organ, and terminating abruptly near the cardiac orifice. All the inferior portion was slightly livid, and, at the pyloric orifice, a livid redness began abruptly, and extended through the whole tract of the small intestines.

In the large intestines, the mucous membrane was natural. A large quantity of a fluid, resembling oatmeal gruel, and of a shade between that and rice water, existed throughout the intestinal canal. There was rather more than the usual quantity of mucus, resembling cream, though not so white.

Liver externally natural—perhaps rather lighter than usual; on making incisions, the black blood flowed more freely than in a healthy state of this organ. The gall bladder contained about an ounce of black bile. The ducts perfectly natural, the bile flowing freely through them. Spleen and pancreas natural. Bladder empty, but not particularly contracted. The veins of the right auricle of the heart rather fuller than usual. No turgescence of the coronary veins. Lungs blue, and turgid with black blood to a very remarkable degree. Cavities of the heart and venæ cavæ entirely empty. No fluid in the thorax. Brain engorged with black blood, and the ventricles contained four or five ounces of serum. We were not permitted to examine the ganglia and spinal marrow.

Case 2. We immediately proceeded to examine the case of Betsey, the black girl, who resided as cook at Mr. A. Thomas's, No. 185 Reed Street, about twenty rods from the house of Mr. G., and where she had lived for several months. Betsey was very temperate and regular in her habits, but a large feeder—of slender frame, but capable of her duties, and generally enjoyed good health; about 20 years of age. She attended church in the afternoon of Sunday, the 1st instant, and made no complaint till six o'clock of that evening, when she felt some sickness and pain at her stomach, and went to bed. At two o'clock, A. M., the family were awakened by her groans. The morning after the examination, I received from her attendants the following account of her symptoms:—She was found stiff with the cramp, and severely affected with vomiting and purging; complained of great distress over the whole body; eyes staring and sunken, and the features contracted. Fifteen drops of laudanum and a little camphor were given, which removed the vomiting in a few minutes. The same dose was repeated in an hour after. The purging, however, continued, and the spasms constantly recurred, attended by great suffering. Profuse sweating took place towards morning, when the surface became rather warmer. At 11 o'clock, she began to sleep, and was then left by her attendants till four o'clock, at which time she was found dying.

The fluid vomited and dejected is said to have resembled rice water. She had no physician. In the progress of the disease, a dose of salts was given, and occasionally wine and water.

The dissection was commenced at 15 or 20 minutes after death. Every muscle was violently contracted, and remained so, without any motion, however, for an hour and a half, when the examination was finished. Skin livid, and petechiæ numerously distributed, appearing with great distinctness on the schlerotic coat of the eye. Features rather sunken; expression of the eye remarkably wild and glaring, corresponding exactly with this appearance in the other case. The eyes were also very much exposed, and turned upwards.

The stomach and large intestines externally natural, and free from flatus. Small intestines livid. Veins of the omentum and mesentery more than usually full. Mucous coat of the stomach slightly discolored; scarcely a morbid appearance. This organ contained a small quantity of a fluid resembling rice water. The lividness of the small intestines existed in the serous membrane, the mucous coat being natural. These organs contained a considerable quantity of a yellow fluid. The large intestines were filled with a fluid exactly resembling rice water, with flocculi like "half-dissolved flakes of snow." Mucous membrane natural. The mucus, which resembled a creamy substance, did not exceed the natural quantity.

Liver very purple—the left lobe in a plethoric state, and the right lobe very turgid, with black blood. The gall bladder contained about an ounce of yellow bile. The ducts perfectly natural. Spleen and pancreas natural. Urinary bladder contracted to a small, hard knot, evidently owing to the spasm. No fluid in the cavity of the abdomen. The lungs were found in a perfectly natural state. The heart was engorged with black blood, as were also the venæ cavæ. No fluid in the thorax. We were too much fatigued to enter on the examination of the brain, &c.

July 4.—Cases of this disease are now constantly occurring, and it attacks all ages from infancy. The symptoms are uniformly such as I have described. Dr. Bliss informed me to-day that he witnessed the dissection of a child, in which the morbid appearances were exactly such as I have described in Betsey's case. The invasion is very sudden, and without any premonitory symptoms. I believe some have recovered. They generally die in about 12 hours from the attack. It has now appeared in almost every part of the city, and no one thinks of tracing it to contagion. The vomiting is easily allayed by small doses of laudanum. The spasms are obstinate. The collapse is immediate, and no reaction takes place. In short, it is *death* at the very invasion. The probable number of deaths to this time, 6 P. M., is from 30 to 40.

Very respectfully yours,
To Dr. J. C. Warren, Boston. Martyn Paine.

Valuable Communications are again excluded by want of room.

Whole number of deaths in Boston for the week ending July 7, 32. Males, 14—Females, 18.

NOTICE.

The Copartnership heretofore existing between the Subscribers, under the Firm of JARVIS & PEIRSON, is dissolved by mutual consent. N. Jarvis will settle the affairs of the late Firm.
Nathan Jarvis.
George W. Peirson.

NATHAN JARVIS will continue the Business of Manufacturing and Selling *Drugs and Medicines*, at 188 Washington Street. Physicians and others will be supplied with Choice Medicines on reasonable terms. July 11.

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THE

BOSTON MEDICAL AND SURGICAL

JOURNAL.

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ON CONGESTION.

[Communicated for the Boston Medical and Surgical Journal.]

By Congestion is understood a preternatural and disproportionate accumulation of blood in the vessels of some particular part of the animal system. Congestion makes a great figure in the writings of some late pathologists; but it is believed to be always a mere effect, and never a cause of disease, and that it is a matter of comparatively small consequence, and, therefore, that an undue importance has been attached to it. However, be this as it may, it appears to me certain that erroneous opinions, in relation to it, are at present widely prevalent, and therefore it is a topic well worthy of consideration.

The heart is well known to be the principal, if not the sole organ, by whose power the blood is propelled from the internal and central parts of the system to the external and extreme parts. It is well known, also, that the atmosphere presses upon the human body, with the weight of a column of quicksilver of about thirty inches, or a column of water of about thirty-three feet. This is calculated to be equivalent to about fifteen pounds to every superficial inch, or about fourteen tons upon an ordinary sized man. Now the pressure of the atmosphere is a powerful antagonist, or opposing power, to the action of the heart in filling the superficial capillaries. When we consider these facts, it will be obvious that the relative distribution of the blood, between the internal and external parts of the system, must inevitably be varied by any disturbance of the balance between the strength of the action of the heart and the atmospheric pressure. In fact, this disturbance of balance, between these two antagonist powers, must be the most common, and even the principal cause of congestions. Conclusive evidence of this position is found in the familiar fact, that, on the exhaustion of air from a cup applied to any part of the skin, a considerable congestion of blood, in the vessels of the part over which the cup is applied, immediately takes place.

But, by those ignorant of the variations in the relative distribution of the blood between the external and internal parts of the system, in consequence of a disturbance of the balance between the strength of the action of the heart and the degree of atmospheric pressure, an explanation of the swelling of a part that is covered by the receiver of an air-pump, from which the air is more or less exhausted, has been attempted in two other ways, viz.: by the expansion of the mass of the circulating fluid itself, and by the rarefaction of the air supposed to be contained in it. As liquids, however, are but slightly compressible and expansible by increase or diminution of pressure, the first solution is altogether inadmissible. The latter, indeed, has more plausibility, but is nevertheless entirely inadequate to the purpose for which it has been used. There is not, in reality, sufficient air contained in the blood to produce a twentieth part of the effect in question; and, besides, the phenomena that are to be explained take place under such circumstances as would not, in any way, affect the expansibility of what little air is actually contained within the system. In my view, there is conclusive evidence that superficial congestion is not occasioned by the expansion of the air in the blood, in consequence of a diminution of atmospheric pressure, from the fact, that increasing the strength of the action of the heart, without any diminution of atmospheric pressure, equally occasions superficial congestion. That the equable distribution of the blood, between the internal and external parts of the body, is mainly dependent upon the relative strength of the action of the heart, and the degree of atmospheric pressure upon the surface of the body, is supported by the most satisfactory evidence, and (as I think) may be considered as resting upon the highest proof. Various pathological phenomena will be mentioned hereafter, which prove these points still more decisively.

As the brain is surrounded by an impenetrable and unyielding bony paries, from which atmospheric pressure is entirely excluded, and, besides, is situated at one of the extremities of the body, remote from the centre of the circulation—it is much more liable to be affected by variations, in the relative strength of the action of the heart, and the degree of atmospheric pressure upon the surface, than any other part of the system. Next to the encephalon, the thoracic viscera are the least affected by the weight of the atmosphere; and the abdominal viscera are undoubtedly considerably less under its influence than the surface of the body.

One of the purposes answered in the animal economy, by having the brain surrounded by a bony paries, from which atmospheric air is excluded, is undoubtedly the prevention of immediate death, under great hæmorrhage, by a greater relative determination of blood to this viscus; since a greater proportion of blood is necessary for the continuance of the functions of the brain, than for a continuance of the functions of any other part; and, in cases of considerable hæmorrhage, if this organ had not more than its proportional share of the vital fluid, life must cease in many instances where the patient now recovers.

Inflammation, independent of any disturbance of balance between the strength of the action of the heart and the degree of atmospheric pressure, also occasions a congestion of blood in the vessels of the part in which it is seated, and this congestion is essential to inflammation as a disease.

Any considerable local atony, or diminution of the power of resistance to the *vis a tergo*, in the vessels of any particular part or organ, likewise occasions a congestion of blood in such part, independent of any disturbance of balance between the two antagonist powers just mentioned.

Great intellectual exertion, and, as is supposed, a paroxysm of raving in mania, occasion a temporary preternatural determination of blood to the head; but, as this is always inconsiderable and transient, and, as a symptom, never requires the interference of art, it is not to be considered as a pathological congestion.

Sometimes two or more of these causes will be combined, in the production of particular cases of congestion. For example: in a superficicial entonic or active inflammation, the preternatural strength of the action of the heart, which always accompanies such a case, if it is of any considerable extent, concurs with the inflammation itself, in the production of a congestion in the vessels of the diseased part; and, in an atonic or passive visceral inflammation, in connection with which, the strength of the action of the heart is always diminished, the atmospheric pressure upon the surface of the body concurs with the local disease, in the production of the congestion. In the last case, a diminution of the vital energies of the vessels of the diseased part, in a proportion greater than that of the rest of the circulating system, is another concurrent cause of congestion in the seat of the topical affection.

From these laws, it will be obvious that congestion may be produced in the following five ways:—

1st. General superficial congestion takes place when the strength of the action of the heart is preternaturally increased, so as to disturb the balance between atmospheric pressure and the *vis a tergo*. If this preternatural increase of the strength of the action of the heart is not extreme, mere simple superficial congestion is all that takes place; but if it is extreme, the blood is so forcibly propelled from the centre to the extremities of the circulation—or, in other words, from the heart into the capillaries—that a congestion also takes place in the minute vessels of the brain, as well as in those of the surface of the body. This congestion in the brain, as well as in the surface, is owing to the fact, that atmospheric pressure is entirely excluded from the encephalon, by means of the bony paries with which it is surrounded; so that there is no antagonist power, in this part of the system (except the mere contractility of the coats of the bloodvessels), to the *vis a tergo*. General superficial congestion, produced in this way, is always of an entonic, sthenic, or phlogistic character; and an ordinary case of true cauma or synocha affords a familiar illustration of it. The addition of cerebral to superficial congestion, shows a still more intense degree of entonic, sthenic, or phlogistic diathesis, and is well illustrated by neglected or ill-treated cauma or synocha, which passes into cephalitis-caumatodes. This sort of congestion can be relieved only by reducing the strength of the action of the heart, which is effected, in by far the best manner, by bloodletting; but, as is believed by many, may be accomplished also by sufficiently large quantities of nitrate of potassa, and some other agents of similar powers, though these means are probably less eligible than depletion.

It is well known that in pure and unmixed cauma or synocha, and in all the unequivocal and exclusively caumatoid phlogotica, there is a very considerable preternatural increase of the strength of the action of the heart; and (as we should expect) there is a consequent congestion of blood in the vessels of the surface of the body. This is evinced by the strong sensation of superficial fulness and distension which the patient constantly feels, and by the actual turgescence and tumefaction visible even to the bystanders. When the preternatural strength of the action of the heart, in these diseases, is removed (as it can be perfectly done), either by depletion or very large and often-repeated doses of nitrate of potassa, etc., the fulness and distension of the surface immediately disappears, and it assumes a comparatively shrunk appearance. That these agents produce this effect, in consequence of diminishing the preternatural strength of the action of the heart, is evident from the circumstance that the effect in question never takes place without this previous reduction. Now, when we let blood, we weaken the force of the action of the heart, without lessening the pressure of the atmosphere. The capillaries of the surface are consequently not so well filled with blood, on account of this disturbance of the balance between the strength of the action of the heart and the atmospheric pressure ; a paleness of the skin is produced, and there is a greater relative determination of blood to the viscera, upon which there is no material atmospheric pressure.

But it may possibly be supposed that bloodletting produces this effect exclusively by its reduction of the mass of the circulating fluid, without at all varying the relative distribution of the blood between the internal and external parts. It is, however, a well-ascertained fact, that the process of depletion actually varies the relative distribution of the blood —perhaps even more than in the same proportion in which it lessens the mass of the blood circulating in the vessels. The disproportionate variation in the relative distribution of the blood, which is produced in this way, is, however, always from the surface, and towards the viscera, and particularly towards the head. In proof of this, I shall hereafter quote several physiologists and pathologists, who treat directly upon this point. It is conclusive that the shrinking and paleness of the surface, which follow an ordinary depletion of blood, are not entirely or even mainly occasioned by a mere reduction of the mass of the circulating fluids ; that exactly the same shrinking and paleness may be produced, in the same circumstances, by a sufficiently free use of nitrate of potassa, tartrate of antimony, etc., without any depletion, or any evacuation of any sort. In cases where there was no previous diminution of the strength of the action of the heart, and consequently no congestion of blood in the vessels of the brain, a mere ordinary bleeding seems even to increase the positive, as well as the relative quantity of blood in the head; but an extreme depletion diminishes the positive, while it increases the relative quantity. In cases where there was very considerable previous atony, and very considerable congestion in the vessels of the brain, a moderate bleeding seems likewise to increase both the relative and the positive quantity of blood in the head. We cannot say what would be the operation of a very large bleeding in such cases, in relation to cerebral congestion, because such a bleeding, under such circumstances, I believe infallibly destroys the patient.

2d. General superficial congestion sometimes takes place from a paralysis of the capillaries of the surface, and this even when the strength of the action of the heart is greatly impaired. This sort of congestion is always atonic or asthenic, in the highest degree. I have never witnessed it, except, in a few cases, immediately on the attack of that singular disease, typhus syncopalis—and in this only in instances that were speedily fatal. I have been informed of its occurrence in some cases of rosalia or scarlet fever. In the few instances in which this sort of congestion has fallen under my observation, the most shocking swelling of the whole surface of the body has rapidly taken place, and the internal parts of the system have seemed to be almost destitute of blood. The most powerful stimulants are the only means, within my knowledge, that have ever seemed to afford any relief in this sort of congestion; and hitherto even these have proved only palliatives, and not remedies, in those cases of it which have occurred in typhus syncopalis.

3d. General visceral congestion takes place only when the strength of the action of the heart is more or less impaired, so as to disturb the balance between the *vis a tergo* and the atmospheric pressure upon the surface of the body. In this sort of congestion, there is a greater determination of blood to the head than to any other part, and a greater to the chest than to the abdomen; because this is the order in which they are least affected by atmospheric pressure. This variety of congestion is always atonic, and it exists to a greater or less extent in all the species of typhus—also in all cases accompanied with debility of the heart and arterial system; and, to a greater or less degree, it is the invariable result of free depletion, except in general entonic diseases. Congestion of this character can be remedied only by invigorating the system generally, and particularly by increasing the strength of the action of the heart.

I have observed that the viscera are not materially affected by the external atmospheric pressure. This is strictly true, with a very slight exception; for, so far as the external bulk of the body is actually lessened by this pressure, they are slightly compressed, when not defended by a bony paries. The brain, however, is surrounded by an impermeable and unyielding bony paries, into which atmospheric air can have no access. Now it will be obvious that the more the force of the action of the heart is weakened, either by the abstraction of blood or by any other means, the less able will it be to fill the superficial capillaries upon which the atmosphere presses, and consequently the greater will be the determination of blood to the viscera; and the greatest must necessarily be to the brain, because this is least affected by atmospheric pressure—or because, in truth, it is not at all affected by such pressure.

Of late, indeed, it has been contended, by some distinguished physiologists, that atmospheric pressure is the sole agent in producing the motion of the blood in the veins; but though I do not think that this has been shown satisfactorily, and though I do not doubt that the motion of the blood in the veins is mainly caused by a power which is to be sought for in the system—yet, as I have just said, I consider it as capable of the most satisfactory proof, that the equable distribution of the blood, between the internal and external parts of the body, is mainly dependent upon the relative strength of the action of the heart, and the degree of atmospheric pressure upon the surface. I consider it certain, that the reason why there are general visceral congestions in low typhus, of whatever species, is the diminution of the strength of the action of the heart, while the atmospheric pressure remains the same; and the reason why there are greater congestions in one viscus than in another, is principally a greater diminution of the power of resisting the combined force of the heart, and of atmospheric pressure, in the vascular system of such viscus.

But it may, perhaps, be supposed that this last statement is the result of reasoning merely; and it may be inquired, how do facts correspond? Setting aside the personal observations and experience of the author of these remarks, and of the professional gentlemen with whom he has practised, let us examine well-known and published testimonials, from highly distinguished physicians. DR. GOOD says—"In the commotion which takes place from copious venesection, it should be observed that there are often local determinations" (of blood); "for, the more we lessen the general strength, the more we make an inroad upon the instinctive power of preserving a balance in the circulating system; and, as the determinations are almost uniformly accompanied with *an apparent, though a deceptive increase of force, as well as fulness in the pulse, and other symptoms of great violence of action*, the friend to phlebotomy is too often stimulated to an excessive use of his lancet, through several times in succession, still wondering at the perversity of an action, whose mischievous, and, it may be, fatal perseverance, is only maintained by his own exertions."

DR. PRING, upon the subject of congestion of blood in the brain, remarks:—"It is commonly, and, in my own experience, it has been invariably the case, that those who have sustained great losses of blood suffer more or less from what is called *determination to the head.*" "Most commonly the symptoms are intense pain and throbbing in the forehead or back part of the head, with a pulse seldom under ninety." DR. PRING adds—"I have known these symptoms to proceed on, with a pulse from a hundred and twenty to a hundred and forty, to delirium, APOPLEXY, and death."

DR. COPLAND (in a paper in the London Medical Repository) observes:—"The current of opinion has lately set strongly in favor of the supposition (and it is no more than supposition), that whatever symptoms appear, which may be referred to cerebral excitement, there must consequently be inflammation, general plethora, or local determination." "That the last named state of the circulation may be often present under such circumstances, we will readily allow; but that either of the other two conditions should exist, or be necessary to the production of the manifestations in question, is perfectly gratuitous, and what we positively deny." "In support of this, we can refer to facts derived from experiment and observation." "Bleed a man, or any other animal, frequently, largely, but gradually, either when in good health, or when suffering under some disorder not connected with cerebral excitement, and, as a consequence of such conduct, if the depletion be carried too far, we shall have symptoms denoting determination to the brain. If further depletion be instituted, delirium will generally supervene; and, even if depletion be carried so far as to produce death, the cerebral derangement will be manifest to the last moment of existence. On dissection, while all the other textures shall be found entirely deprived of blood, the brain will generally evince more than natural vascularity, and always an infinitely greater fulness of blood, relatively, than any other part of the body." "We will allow that these effects are not observed, if very large quantities of blood are lost" (at once), "so as to deprive the animal of life, in a very short space of time: but here the reason is obvious; the animal dies before the vascular system is accommodated to the mass of the blood circulating in it." "Now we assert that we have observed these phenomena which we have described, and have seen those appearances in individuals whose lives we consider to have been lost by ultra-depletion; and we further know that the same phenomena have been uniformly noticed in experiments upon brute animals." "But we shall be excused if we briefly illustrate this important point by more familiar examples." "How often is it observed, in profuse uterine hæmorrhages, that, when the patient is but just saved from the immediate loss of blood, great care is requisite to save her from the nervous derangement which uniformly supervenes." "Irritative fever is always the consequence, and *is more immediately the consequence of the local determination and irritation to which the brain is subjected*,* notwithstanding that the state of the parts concerned in the process which she had previously experienced, might be supposed to divert from that organ." "In such cases, the arteries running to the head beat violently; sensation is quick and lively; the least irritation of the organs of sense, or excitement of moral affections, is apt to induce delirious manifestations; the lower extremities are pale, shrunk, and cold, while the head is hot, painful, etc." "Now all know the treatment which alone succeeds in these cases—which treatment further illustrates that peculiar state of the vascular system, and of the body itself, in which the cerebral excitement originates." "But not only *is local determination, and especially to the brain, the consequence of depletion; it still more familiarly supervenes upon a low state of the vital energies of the system.*" "The individual, in whom these energies are perfect, is seldom subject to those disorders which depend upon local plethora or excitement; it is principally those, in whom the vital or nervous powers of the constitution are greatly weakened, who experience local determinations, or those derangements in the circulation of the brain, which are evinced by corporeal and mental derangements." "It is chiefly to those individuals, that the dictum *ubi irritatio ibi fluxus* is strictly applicable; and, whether the irritation be of a physical or a moral nature, the effects will be apparent, and commensurate with its intensity, or with that disposition of the system to which we have alluded."

Bonnar records the phenomena which appeared on *post obit* examination of a person who died from hæmorrhage:—"A man, aged 34, of a spare habit of body, lost, by epistaxis, about three pounds of blood." "This took place about the end of August." "In about ten days afterwards, as soon as he had recovered his former strength, the bleeding recurred, and continued to do so at intervals, till the third of October, when he died." "The quantity of blood which he lost was carefully measured by the attendants, and was calculated to be upwards of 35 pounds." Bonnar remarks that, "in the history of this case, some facts of considerable importance must be noted, and," he says, "they ought always to be kept in recollection, during the employment of large depletions." "To the very last, the muscular strength of the patient remained tolerably good." "Almost immediately before death, he could raise himself in bed; and, had it not been for the oppressive, and most painful" distressing "sickness, he would have been capable of a very considerable degree of exertion, at a time when not many ounces of blood were circulating in his system." "After every one of the attacks, *the pulse rose considerably in strength and frequency.*" "The blood was, in every instance, very soon coagulated, but showed none of the buffy coat." Bonnar remarks, that "*the rising of the pulse, after excessive bleeding, has been remarked by many of the best pathologists.*" He adds—"A knowledge of the phenomena, resulting from excessive losses of blood, ought to teach us, that *an excited state of the arterial pulsation** is by no means a proof of the necessity of depleting measures," etc.

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* Our author appears to me to be unfortunate in this attempt at a *rationale.* The nervous disturbance produced by great hæmorrhage, and the irritative constitutional febrile affection, which takes place at the same time, in my view is not, as is supposed, the result of the increased determination of blood to the brain; but the former is probably the effect of the weakness produced by what is, in reality, a positively deficient supply of blood to the brain, and the latter is a perfect *hectic of inanition*, produced by a want of nutrient matter in the greatly diminished mass of circulating fluid, for the assimilating vessels to act upon, and it is perfectly analogous to what takes place from actual starvation. The *cerebral excitement* spoken of, in the next sentence but one, is mere irritation, originating in the same manner.

Dr. James Johnson says—in a brute animal, bled to death by opening the jugular veins, "the contents of the cranium and spinal canal were so gorged with blood, that it might, at first sight, have been imagined that bleeding would have saved the animal." He declares that, "in every case where brute animals were bled to death, there was effusion of water in the brain, and on the spinal cord, often accompanied with red spots, like inflammation." He says—"Every one must have seen effusion in the chest, from carrying bloodletting too far, in certain kinds of pneumonitis, accompanied with typhoid fever, and with irregular distributions of blood." He adds—"With these facts and reasonings before our eyes, is it not evident that the present rage for subduing fever by bloodletting alone, and that not by pints, but by half-gallons at a time, is pregnant with danger, and likely to bring a valuable remedy into utter disgrace ?" "Indeed" (he says, in another place), "we have frequent occasion to deplore the ultra-depletory mania, which has seized some weak brains of the present day, and much fear it will bring a character of rashness and danger on a most important remedy, when judiciously managed."

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* It should be particularly remarked, that the "apparent, though deceptive increase of force, as well as fulness, in the pulse, and other symptoms of great violence of action," of which Dr. Good speaks, as so often following bloodletting, and *the considerable rising of the pulse* "in strength and frequency," and "the excited state of the arterial pulsation," of which Dr. Bonnar speaks, as following each attack of hæmorrhage, are, in fact, merely "apparent and deceptive," and do, in reality, consist in irritation instead of strength. I have often witnessed what is so generally called "the rising of the pulse," from depletion, and, so far as relates to *strength of action merely*, I have uniformly found that the artery yielded, and pulsation became imperceptible, under much less pressure, after bleeding, than it did before. I think I may affirm safely, that bleeding *always*, and *without exception*, diminishes the *force* of the pulse, as well in atonic as in entonic cases, and as well in cases in which neither of these conditions exists. I repeat, that what is called *a rising of the pulse*, after bleeding, is not an increase of the *strength* of the arterial action. When the pulse is preternaturally *strong*, and at the same time small or contracted, and wirey, or feeling like a tense cord, and perceptible both in its systole and diastole (as in entonic phlegmonous enteritis)—bleeding, while it diminishes the *force* of the pulsation, also relaxes the contraction, so that the artery becomes larger, and the pulsation more distinct, as well as softer and *weaker*. This some may call *a rising of the pulse*; but such a condition of the circulation never occurs, except in highly phlogistic diseases. When the pulse is preternaturally weak, and at the same time small or contracted, and wirey, and feeling like a tense cord, and perceptible both in its systole and diastole (as in atonic and erythematic enteritis), bleeding neither makes it more full, nor more distinct, nor produces any other effect that can justly be called *a rising of the pulse*. Certainly a short or quick, and a jerking beat of the artery, which often follows injudicious bleeding, does not constitute *a rising of the pulse*, since it always indicates both a diminution of fulness, and a diminution of strength.

4th. Local congestion may be occasioned, in any part of the system, by any considerable diminution of the tone, and consequently in the power of resistance to the *vis a tergo*, in the vessels of such part. This is obviously a congestion of an atonic character, and can be remedied only by obviating the local atony, upon which it depends. It may be considered as certain, that any considerable weakness, or deficiency in the power of resistance, in the coats of the bloodvessels of any particular part or organ, in comparison with the rest of the vascular system, will occasion a preternatural determination of blood to such part, independent of any increase or diminution of the strength of the action of the heart; and I shall not now spend time in proving it.

5th. Local congestion may be occasioned, in any part, by the presence of inflammation of any species, to which it is always more or less essential. Inflammatory congestion may be either entonic or atonic, according to the character of the inflammation of which it is a part. It is to be relieved only by relieving the inflammation, which, if entonic, will require antiphlogistic treatment merely; but if atonic, it will require a deobstruent method, and, in low cases, excitants in conjunction.

Congestion may be said to be *essential* when it belongs invariably and necessarily to any particular disease, and when, in fact, it constitutes an essential part of such disease: and it may be considered as *accidental* when it is not necessary to, does not occur invariably in, and cannot be considered as making an essential part of, a disease, but only happens occasionally in certain cases of it.

From what has been said, it will be perceived that there are at least four sorts of congestion, viz. :—

1st. *Simple Superficial Congestion*, produced by a preternatural increase of the strength of the action of the heart.

2d. *Simple Visceral Congestion*, produced by diminution of the strength of the action of the heart.

3d. *Paralytic Congestion*, produced by a preternatural weakness and deficiency in the power of resistance in a part or the whole of the capillaries, or in the coats of the vessels of any particular part or organ, while the strength of the action of the heart remains in its natural state, or, at least, is not diminished in the same proportion. And

4th. *Inflammatory Congestion*, produced by the presence of topical inflammation, of some sort or species, in the part in which the congestion exists.

The first sort of congestion is always of an entonic, sthenic, or phlogistic character; the second and third sorts are always of an atonic or asthenic character; while the fourth sort may be either entonic, irritative, or entonic, according to the specific nature and the diathesis of the inflammation, and according to the general condition of the subject of the disease.

At the present time, when congestion is exalted to such a high rank in pathology, we often hear certain articles of the materia medica mentioned as being liable to produce this effect. Thus, for example, cinchona, with many practitioners and writers, has acquired this character, and is often styled a congesting tonic. In my view, however, no article is capable of producing congestions, unless it is competent to increase the strength of the action of the heart, to such a degree as not only to occasion a preternatural determination of blood into the capillaries of every part, so as to leave the great vessels comparatively empty—or unless it is adequate to the production of so great atony or weakness in the coats of the bloodvessels of some part or organ, in comparison with other parts of the system, that, from mere want of resistance to the ordinary *vis a tergo*, an accumulation of blood takes place—or unless it has the power of weakening the strength of the action of the heart, to such a degree that it is no longer able to force the blood into the capillaries of the surface, in opposition to the ordinary atmospheric pressure. Now neither cinchona, nor any analogous article, has any such powers ; and yet it is to these articles particularly, and to the tonics generally, that the property of producing congestion is mainly attributed. It is, in reality, in other classes of remedies, beside the tonics, that congesting articles must be sought ; for it would be an absurdity to say that a tonic, or a stimulant, is both congesting and tonic or stimulant at one and the same time. It is true that tonics and excitants, if given during the existence of true phlogistic diathesis, might so increase that condition, as to produce congestion where it did not previously exist. But what practitioner, in his senses, would think of employing such articles in such a condition of the system ? At all events, no tonic, if given in a healthy, or in an atonic state, is ever capable of producing a true phlogistic diathesis. We must therefore seek for congesting agents in the other classes of medicines. Narcotics, without doubt, when so managed as either to diminish the vital energies of the brain, or the strength of the action of the heart, produce congestion in the brain and other viscera ; but, when so managed, and when of such a nature as to increase the strength of the action of the heart, they do not diminish the vital energies of the brain, nor produce congestion either in the head or elsewhere. It is among the reducing, or antiphlogistic remedies, that we must look for congesting agents ; and, accordingly, the several processes and agents of this class of medicines are found to produce visceral congestion, precisely in the same proportion in which they produce a preternatural weakness of the action of the heart, or a preternatural weakness of the bloodvessels of any particular part or organ. Of the antiphlogistic or reducing processes or agents, bloodletting, and purging with the refrigerant salts, are the most powerful, and of course the most efficient in the production of congestion ; but nitrate of potassa, tartrate of antimony, and what is commonly called dieting, i. e. starvation, if vigorously employed, are very far indeed from being inefficient in this respect.

WILLIAM TULLY, M.D.

New Haven, July 2d, 1832.

CHOLERA—EXAMINATION AFTER DEATH.

Post Mortem Examination of a Case of Supposed Spasmodic Cholera, with Remarks. By J. A. Allen, M.D.

[Communicated for the Boston Medical and Surgical Journal.]

In accordance with my suggestion, previously made, to Dr. Wright, of Whitehall, he has availed himself of an early opportunity of making a *post mòrtem* examination of a case of suspected spasmodic cholera. The patient was a child, two and a half years old, whose father was an inhabitant of that place—intemperate, resided in a poor, miserable hut, and died with symptoms of the Asiatic cholera seven days before. The father had been familiar with the emigrants who recently died at Forts Edward and Miller. The child, says Dr. W., had enjoyed good health, as the mother stated, till daylight on the morning of June 22d, when it was taken with "vomiting, purging, and cramps of the legs, stomach, &c.; discharges from the stomach and bowels, of a transparent jelly appearance; cold extremities, and sinking of the vital powers." The vomiting ceased two hours before death, which occurred in about five hours from the attack.

Dr. W., on examination, found the stomach distended with a thin, turbid fluid, which was so confined that it gushed out, through the first aperture made in its coats, to the distance of a foot or two, and continued to flow several minutes. The quantity contained in the stomach was supposed to be about three pints. The duodenum was quite empty, and the upper portion of the small intestines contained a small quantity of muco-gelatinous matter, slightly colored; further down they were more loaded with a white matter, resembling the white of an egg. In the lower portion of the smaller intestines, there was an intus-susception, of about two inches in length. The large intestines were free from any appearance of disease, and had no contents. The coats of the alimentary tube exhibited no marks of disease, except a slight discoloration in those of the stomach, and of the portion of the canal next to the incarcerated part. Two common-sized worms were found in the bowels, and several small ones. The liver and spleen were in a state of congestion with blood. The gall bladder was filled with bile, and the duct leading from it impervious with apparently concreted bilious matter.

It is to be regretted that Dr. W. made no examination of the heart, large bloodvessels, the lungs, and brain. His exhibition, however, of the case is obviously sufficient to fix the specific character of the disease, while it evolves additional facts respecting the pathological character of the alarming epidemic cholera, of which this case was probably an instance. No blame, in short, should be attributed to Dr. W. because he did not examine more thoroughly; on the contrary, he is entitled to public gratitude for what he did do, since the suspicious nature of the complaint was such that he was obliged to make his examination alone, except in the presence of a solitary old matron protected by a huge bunch of tansey.

Had this case been an instance of simple intus-susception, its fatality would not have been so speedy. This affection of the bowels was produced by the spastic action of the muscular coats of the alimentary tube. Analogies are mentioned in the Asiatic reports. Besides, while death from intus-susception rarely occurs within several days, in the present case it took place within five hours from the attack. Had the ailment been caused by the irritation of worms, such kind of effusions and ejection would not have been discovered. In short, the symptoms of the disease, its rapid fatality, and the appearance on the autoptical examination, were in perfect accordance with those cases of cholera which have been reported from India. Upon these morbid appearances, DR. JAMESON remarks—"In many, especially those who died early, the stomach and intestinal canal were found full of a whitish, turbid, dark or green-colored fluid, without the slightest mark of inflammation. The liver was congested, inflamed, and harder than usual, &c." The stomach and gall bladder have almost universally been found filled, and several of the vital organs gorged with blood.

In summing up the whole history of this epidemy, it is evident that a deadly sedative agent presses on the vital organs, especially the nervous, vascular, and glandular systems, suspending or deranging their functions. The suspension or derangement of the action of the nervous and muscular systems is shown by the impaired sensation, and inordinate and violent muscular contractions; that of the vascular by the subsidence of the pulse, and the fatal effusions and congestions usually found in some of the vital organs. This pulselessness, as it has been called, evinces an unequal expenditure, or a want of vital power. From this sinking of the vital energies, the complaint has been called "*Death-stroke*," or "*Mort de chien.*" There is an augmented or morbid action of the secernents of the mucous system, while there is a suspension of the functions of the glandular and serous systems. This is proved by the increased quantities of ejections from the stomach and bowels, while the skin, bladder, &c. seem to have entirely lost their functions; and the same may be said of the *serous membranes;* for no particular morbid appearances have been found, says DR. SCOTT, in any of the cavities of the body which are lined with serous membranes, or in these membranes themselves. The cavities of the pleura, of the pericardium, and of the peritoneum, have almost uniformly been found in a natural state. Hence it appears that in spasmodic cholera the natural functions are all in turn disordered, but not invariably so; that the vital functions, especially of the heart and bloodvessels, are invariably affected, and consequently the functions of the lungs must suffer with that of the heart. The animal and sensorial functions, it seems, suffer least of all in this morbid struggle; for the mind, we are told, usually remains clear and unimpaired.

If the preceding view of this subject be correct—and that it is, we have abundant evidence—it is obvious that no one remedial agent, and, in fact, no one class of remedial agents, can be found adequate for its cure. There must be a simultaneous combination of active remediate measures, to insure any prospect of success in a violent attack. Upon the general course adopted with the most success in India, MR. CORBIN remarks to SIR GILBERT BLANE—"The outline of the treatment alluded to, is to administer twenty grains of calomel, and to wash it down with sixty drops of laudanum, and twenty drops of oil of peppermint in two ounces of water; to bleed freely in the early stage, and to support the warmth by external heat, the hot bath and hot friction, and internally by cordials."

The adaptation of the above outline of practice must be governed by general principles of medical science. No fixed method, it is evident, can be adopted. The science is not thus degradingly empirical. Cholera cases, like all others, require a particular adaptation of remedies, to meet the exigency of each individual case.

Middlebury, Vt., July 2d, 1832.

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THE CHOLERA.

In England and Scotland, the whole number of cases to the last date was 10,499; deaths, 3,941. At Liverpool, the cases are not numerous. In Ireland, they are diminishing. In Montreal, the number of new cases are few, but more malignant than heretofore—almost every one proving fatal. We extract the following from the Atlas, published in this city, as, if correct, being worthy of particular note:—

A Case of Cholera in Erie, Pa.—An aged woman died of Asiatic cholera, at Erie, on the 26th June. This case, we think, is full of instruction. She was an emigrant, who arrived at Quebec on the 2d June, and whose husband died of cholera on the passage. She made her way through the Canadas to Buffalo, where she took the steamboat, and was landed at Erie on the 22d. On the 23d, she washed the clothes of her deceased husband, and on the 25th was taken with cholera, of which she died on the 26th.

At Philadelphia, one case has been reported by the Board of Health. One at Newark, N. J.; four at Kingston, N. Y.; and four at New Haven, Ct.

At Albany, a river town, where it was expected the disease might be very rife, the number of cases is quite limited, and a few only have been said to exist in other and neighboring towns.

At New York, the report in our last was to the 8th instant. On the 8th, there were 42 cases and 21 deaths. On the 9th, 48 cases and 14 deaths. On the 10th, 66 cases and 19 deaths. On the 11th, 76 cases and 25 deaths. On the 12th, 71 cases and 26 deaths. On the 13th, 66 cases and 32 deaths. On the 14th, 86 cases and 44 deaths. Besides these, there were reported, at Bellevue Almshouse, situated directly in the Sound, and containing eighteen or twenty hundred inmates—57 cases and 14 deaths on the 9th; 43 cases and 25 deaths on the 10th; 58 cases and 25 deaths on the 11th; 48 cases and 25 deaths on the 12th; 35 cases and 17 deaths on the 13th; 29 cases and 22 deaths on the 14th.

The Medical Committee, sent hence to examine the disease at New York, have made a report, which we give below. It will be remarked, as a prominent fact in this account, that the disease, as seen by the committee, is not attended by the extreme suffering usually supposed to attend it; and we also learn, from the committee, that the death by it is easy, compared with the usual modes in which that event is occasioned by other diseases.

To the Board of Health Commissioners of the City of Boston.

The Medical Deputation, appointed by the City of Boston to visit New York, for the purpose of making observations relative to the disease now prevailing in that place, respectfully

REPORT:

That, in the execution of their commission, they have diligently occupied the principal part of three days in that city, in inspecting the various receptacles of the sick, and in instituting such inquiries as they deemed important relating to the object of their mission. They have visited all the cholera hospitals, together with the Almshouse at Bellevue, and some of these institutions repeatedly; they have seen upwards of two hundred cholera patients, and witnessed several post mortem examinations.

They consider the New York disease to be the same cholera which has successively prevailed in Asia, Europe, and Canada. It is distinguished by most of the malignant symptoms which have been noted in other places, and which are already familiar to medical readers—such as the sudden development of the disease; the rapidity with which the patient is prostrated; the short course after which death takes place—a majority having died within twenty-four hours of the time of supposing themselves ill, and some in a less period; thus furnishing, during the stay at New York, an opportunity to observe both the beginning and end of a considerable number of cases. It is distinguished, also, by the suddenness and peculiar character of the alvine evacuations, which at length become floculent and pearl-colored; by the thirst, and burning at the region of the stomach; by the coldness, dampness, and lividity of the skin, and its corrugation on the hands and feet; by the shrinking and peculiar expression of the countenance; by the sound of the voice, resembling a feeble wail; by the more or less spasmodic affection of the muscles; by the sinking and loss of the pulse for a long period before death, and by the clearness of the mind to the last.

But although some of these symptoms were strongly marked in every instance, yet in few were they all assembled; and in some, but those not the less malignant, the most striking symptoms were wanting. The spasmodic affections, though occurring at some periods of almost every case, were not so common, or so long continued, as to constitute a very leading feature. The evacuations were less profuse, and continued through a smaller portion of the disease, than was to have been anticipated. The blue or dark color of the skin was also less universal; and though seldom wanting in the hands and nails, yet many presented it no where else. Very few exhibited a striking darkness of the whole body; though in many, at the last stage, the face and extremities were of a dull slate color, resembling that of the hands of mechanics who work in the black dye. The tongue was not uniformly, nor even generally, cold; nor did the countenance, even at the approach of death, exhibit always the usual peculiarities of the disease.

Another deviation, which was noticed, from the common description, was the absence of any apparent marks of great suffering. The patient seemed generally quiet and indifferent, made but little complaint, and paid but little attention to the presence of strangers, or other external objects. In a room containing ten or a dozen patients, it was not common to see more than one or two at a time under the influence of any degree of spasm, and frequently a perfect stilless prevailed.

No evidence could be obtained that a specific contagion had any agency in the origin or propagation of this epidemic. Its history was like that of an indigenous disease, and the first cases are believed to have occurred among persons confined in the Almshouse and Penitentiary. In the city, the first cases were scattered, isolated, and frequently remote from each other.

In regard to treatment, the delegation believe that more depends upon preventive, than upon remedial means. A large portion of malignant cases of cholera, among which are often found the *earliest* cases which occur in cities, may be regarded as for the most part incurable. This apparently arises, not wholly from the nature of the disease, but, in perhaps a greater degree, from the character of the subjects upon whom it most readily alights. These are the degraded and suffering poor, the superannuated, the intemperate, the debauched—persons frequently whose lease of life is finished or forfeited, and in whom cholera only anticipates, by a few weeks or months, the inevitable course of nature. It would be unreasonable to expect that such cases can be within the control of remedial art.

On the other hand, it is our belief that even during the epidemic presence of the disease, in places generally salubrious, there is little cause for apprehension among the healthy, the cheerful, the active, the discreet, and temperate—those who fearlessly pursue their respective paths of duty, and occupy their minds with other subjects than the cholera. Among such persons, we have reason to believe that the attacks of the disease are comparatively rare, or, if they do occur, are mild, giving timely notice, by premonitory symptoms, which are not difficult to be removed by medical aid. It is not unreasonable to suppose that certain national temperaments, among which we may happily class that of our own population, predispose to immunity from the disease. The English, under parallel circumstances, have suffered less than the French, both in Europe and in Canada.

The assumption which has been frequently made, that the disease differently affects classes in different walks of life, is true only in reference to habits, and not to condition. The laboring part of the community, when temperate and prudent in their modes of living, are as likely as any who could be named to escape the disease. The numerous operative classes, the day laborers, also domestics who reside in clean and comfortable houses, may be expected, certainly as much as any class whatever, to enjoy health, under the ordinary precautions of temperance and regularity of life.

The result of their observations, made in the city of New York, leads this delegation to feel the urgent importance of completing in this city the preparatory arrangements which have been so wisely begun. The disease, perhaps, may not visit our healthy region at all; nevertheless, if it does come, it should not find us unprepared. The provisional hospitals, which have already been engaged and organised, furnish honorable testimonials to the wisdom of the health commissioners. We would beg leave respectfully to urge the importance of engaging, at an early period, a competent number of nurses, carriers, and attendants, both male and female, and particularly that these should be persons of good character and temperate habits, for reasons which will be obvious to the board.

It is expedient that a supply of fuel should be deposited in each of the hospitals, with fire places or open stoves in most of the rooms. During the cold days of this week, the patients in the New York hospitals were thought to suffer by the reduced temperature of the atmosphere—the disease being one in which external warmth is difficult to be maintained. To exclude the cold air, the attendants had recourse, in many cases, to closing the windows and doors of the sick rooms, thus producing a confined and concentrated atmosphere, which, if long continued, must tend to aggravate, as well as to multiply the disease. It would be better, in such cases, to keep up fires sufficient for the necessities of the patients, while the external air might be freely admitted, to accomplish the necessary ventilation.

Litters for the conveyance of the sick should be provided and kept at all the hospitals. These may be conveniently made, in the form of a wide hand-barrow, with a sacking and mattress, the top covered with a cloth awning. The men who are to carry them should be in attendance at the hospitals.

The provisions necessary for the complete and early organization of the cholera hospitals will involve a considerable, and perhaps an unnecessary expense. They are such, however, as must appear proper to every wise man in a reflecting community. Should the event prove that they have been altogether superfluous, there will be sufficient reason devoutly to thank Providence that they are so.

JACOB BIGELOW,
Boston, July 13, 1832. JOHN WARE,
JOSHUA B. FLINT.

In this city, every proper preparation has been made by the authorities for the reception of the disease. Three provisionary hospitals have been fitted up; one at the west part of the city, with the attendance of Drs. Lewis, Stevenson, Fisher, and Dyer; one at the north, with Drs. Ware, M'Kean, Choate, and Thompson; and one on Fort Hill, with Drs. Adams, Homans, Davis, and Davenport. Two or three others are in contemplation. Every accommodation is provided at the hospitals, for such as may be taken sick of the disease without proper conveniences at their own houses, and medical assistance will be at hand at any hour of the day or night. No instance, we apprehend, has been presented, in any place the disease has threatened, of a more thorough or better organised system of preparation, than that now exhibited in this city. Adding to this the general cleanliness of every private and public place, and our elevated and healthy situation, we have every reason to expect that the disease, if it should appear among us, will be limited in its fatality, and divested of many of its horrors.

The 4 cases of cholera at New Haven were in the same family. Mrs. Northup and her son were first attacked. They had come from New York, where they resided in a family in which two persons had died of cholera. Shortly after, Mr. John Jones and wife, the father and mother of Mrs. Northup, and both intemperate, were seized with the same disease. No other cases have appeared at New Haven. We have more and more reason to believe that the view we formerly took, of the plurality of causes of this disease, will be found to be correct.

Effect of Cholera on the Fœtus in Utero.—The London Medical Gazette states that a patient, far advanced in pregnancy, was carried into the cholera hospital in Dublin, and, by a stethoscopic examination, it was ascertained that the child was alive. The next day the woman was dying, and, from the cessation of the fœtal pulsation, it was judged that the child was already dead. In another cholera patient, also in the same hospital, it was ascertained that the fœtus died before the mother.

Whole number of deaths in Boston for the week ending July 14, 24. Males, 12—Females, 12.

Of infantile, 4—marasmus, 2—typhus fever, 2—consumption, 3—scarlet fever, 1—inflammation on the lungs, 1—measles, 3—unknown, 2—convulsions, 2—bleeding at the lungs, 1—from a wound, 1—dropsy, 1—stoppage in the throat, 1.

ADVERTISEMENTS.

DENTISTS' FINE GOLD FOIL.

This very superior Article, manufactured by Marcus Bull, Philadelphia, is kept constantly for Sale, by the Subscriber, at the Manufacturer's Prices. For the excellence of this Foil, reference may be made to Dr. J. F. Flagg, Dr. N. C. Keep, and Dr. Harwood.

July 11. NATHAN JARVIS, 188 Washington Street.

Just Published, at the Office of the Boston Medical and Surgical Journal, "A RATIONAL VIEW OF THE SPASMODIC CHOLERA, chiefly with regard to the Best Means of Preventing it. By a Physician." The purpose of the writer has been to embody, in a plain, practical form, all the important facts and suggestions, in regard to the prevention of Cholera, which have been developed in its march through other countries, and in its progress thus far in our own. These have been so condensed as to form a manual which, from its cheapness, may be within the reach of those to whom, on account of their condition and circumstances, it is most necessary.—Price, 12 1-2 cents.

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THE

BOSTON MEDICAL AND SURGICAL

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INJECTION OF SALINE SOLUTIONS INTO THE VEINS.

Injection of Saline Solutions into the Veins, adopted with success in Malignant Cholera.

The practice of injecting saline solutions into the veins, as a dernier resort in cases of cholera, was recommended by the London Medical Gazette, and we place below the record of the only known cases in which this practice has been adopted.

Sir,—I conceive it to be my duty to let you know, for the information of the Central Board of Health, that the great desideratum of restoring the natural current in the veins and arteries, of improving the color of the blood, and recovering the functions of the lungs, in cholera asphyxia, may be accomplished by injecting a weak saline solution into the veins of the patient. To Dr. Thomas Latta, of this place, is due the merit of first having recourse to this practice. He has tried it in six cases, three of which I have seen, and assisted to treat. The most wonderful and satisfactory effect is the immediate consequence of the injection. To produce the effect referred to, a large quantity must be injected—from *five to ten pounds* in an adult—and repeated at longer or shorter intervals, as the state of the pulse, and other symptoms, may indicate. Whenever the pulse fails, more fluid ought to be thrown in, to produce an effect upon it, without regard to quantity. In one of the cases I have referred to, 120 *ounces* were injected at once, and repeated to the amount of 330 ounces in twelve hours. In another, 376 ounces were thrown into the veins between Sunday, at 11 o'clock, A. M., and this day (Tuesday) at 4 P. M.; that is, in the course of 53 hours, upwards of 31 pounds!

The solution that was used consisted of two drachms of muriate, and two scruples of carbonate, of soda, to sixty ounces of water. It was at the temperature of 108 or 110 degrees.

The apparatus employed in injecting was merely one of Reid's common syringes (the fluid being put into a vessel rather deep and narrow), with a small pipe fitted, that it might easily be introduced into an incision in the veins of the usual size that is made in bleeding. It may, however, be well to keep in mind, that, in the event of the operation being frequently repeated, it may be advisable to inject by different veins.

I forbear at present to enter further into the particulars; nor have we had sufficient experience to speak decisively on the subject. I may, however, mention, that the idea of having recourse to this remedy in cholera, occurred to Dr. Latta, from being convinced (which I am also) that the evacuations upwards and downwards are in reality the serum of the blood; that it is the duty of the physician to replace it, as speedily as possible, by injecting a fluid, as similar to the serum as can be formed artificially, directly into the veins, which has been done here with wonderful, and, so far as we can yet judge, excellent effect. An immediate return of the pulse, an improvement in the respiration and in the voice, an evolution of heat, an improvement in the appearance of the patient, with a feeling of comfort, are the immediate effects. The quantity necessary to be injected will probably be found to depend upon the quantity of serum lost—the object of the practice being to place the patient in nearly his ordinary state, as to the quantity of blood circulating in the vessels.—I have, &c.

(Signed) ROBERT LEWINS, M.D.

TO W. MACLEAN, ESQ.,
Secretary to the Central Board of Health.

Sir,—I did myself the honor to address a letter to you lately, on the effects of injecting a saline solution into the veins of a patient laboring under cholera. We have not frequent opportunities of trying this, which I denominate, admirable remedy, as the disease is decidedly less frequent here; but I have seen it employed in two other cases, in the course of the last two days, with the same excellent effect. Sixty ounces are generally thrown in at once, and repeated at the end of three or four hours. In a case to-day, where I saw fifty-eight ounces injected (being the third time of performing the operation), the patient's pulse, at the commencement, was 180, very small, and very feeble. She was excessively restless, with a feeling of great weakness and tormenting thirst. Before twelve ounces were injected, the pulse began to improve; it became fuller and slower, and it continued to improve until, after 58 ounces had been injected, it was down to 110. Before I left the patient (a woman) her condition was altogether amazingly amended. There was a fine glow and a slight perspiration on her face; the veins on the back of her head were well filled; the restlessness was removed, the feeling of excessive weakness gone, and the thirst ceased. The pulse was under 100, free, full, and soft! Verily, sir, this is an astonishing method of medication, and I predict will lead to wonderful changes and improvements in the practice of medicine. I have addressed you upon the subject, as the organ, from your high official station, of disseminating a knowledge of the extraordinary facts referred to. It will, of course, give me great pleasure to enter further into particulars upon any particular point on which you may require information, in reference to the cases that have come under my observation.—I have, &c.

(Signed) ROBERT LEWINS, M.D.

TO W. MACLEAN, ESQ.,
Secretary to the Central Board of Health.

In the hands of a man of ordinary dexterity, the common injecting apparatus alluded to in my last will be found to answer the purpose perfectly well; but if the practice I recommend is, as I hope it will be, generally adopted, it will, I conceive, be expedient to advise that a regular and perfect transfusion apparatus be used; at all events, to warn those who inject to beware of allowing air to get into the vein. The tubes, of course, must be filled with fluid, as well as the pipe in the vein, before commencing, and considerably more fluid than it is intended to use ought to be in the vessel from which it is pumped. R. L.

LETTER ON THE CHOLERA.

Addressed to any Medical Gentleman residing where the Cholera is or has been prevailing.

[Communicated for the Boston Medical and Surgical Journal.]

Sir,—Englishmen's wit comes afterwards: I cannot think of everything at once, and shall therefore be troubling you frequently with letters, so long as the subject of cholera commands an interest, making queries upon matters which had previously slipped my mind. *Have you ever met with a case in which opium, alcohol, &c. were fairly tried, according to the principles to be found in the writings of Page, North, and myself, as we use it in sinking typhus, and in other acute asthenic diseases of the lowest kind?* By this I mean, employing at first opium, assisted by other exciting articles and external adjuvants, in so energetic a manner as *to control all the urgent symptoms*, and then so managing the opium as to keep the system above the disease, and also *above its own secondary effects.* I know this to be the true way of managing common asthenic cholera, colic, dysentery, and other similar *atonic* acute affections of the alimentary canal, and of the adjoining viscera. Is malignant cholera an exception? If so, what are the reasons? Does this disease come under my class of cases in which medicines sometimes produce all their specific operative effects without affording any real, permanent, remedial effect? If this is the fact, I can readily see that it must necessarily be very fatal, under the ablest treatment. The cases which I have seen detailed *do not appear* to be of this kind; for almost every one of them —those actually in *articulo mortis* excepted—it seems to me (especially such as continue from six to eighteen hours after medical advice is obtained), *ought to live two or three days longer*, and many of them to recover. No one can tell whether a bad case will not wear out, and finally fail on the fifth or seventh day, or some other critical period; but cannot something like reaction be effected and sustained, for a time at least, by skill and art? If it is a fact, that from a half to a third of all the cases of cholera are absolutely fatal, it is by far the most malignant of all epidemics upon the records of medicine. As yet, I cannot believe this to be the case.

If I must theorise, I should say that vitality is a secretion, and that this secretion is suddenly suspended in cholera. A great part of it is extinguished on the first attack, and the little remaining is wasting as fast as possible; so that what little there is of it acts very feebly, and only partially. Now, if this is a true hypothesis, our indications are to call the remaining vitality into immediate action, to distribute it equally, and to produce a new secretion sufficient to meet the waste, and to restore the regular state of the system. In some low diseases, we seem pretty readily to call all the remaining vitality, or sensorial power, into action, and distribute it tolerably well, keeping it in play till we have *used it all up*, without producing any new secretion. These are the cases in which the patient sinks at the crisis. In the bad cases of cholera, as usually managed, there is a constant running down; nothing stops the waste. But is it true that alcohol does not excite, and opium does not support? I should judge that opium is only given to allay pain, spasms, and vomiting, and that most practitioners are ignorant of its supporting power; or that they so manage as to stupify and debilitate, by not following it in regular successive doses, thus allowing its secondary effects to supervene. Do the patients of cholera die comatose? Is the morbidly clear intellect, which we sometimes see in fevers, a general thing in cholera? Are the nerves arising from the spinal marrow affected, rather than those from the brain? The latter is usually the fact in sinking typhus. How great a proportion of those who recover, go through a typhus? And is this typhus attended with daily *gastric sinking*? Was the disease in Montreal always preceded by diarrhœa? If so, was it proper to take a cathartic, as many recommend, during this diarrhœa? If this *is* the fact, and purging under the predisposition *is* a preventive, this circumstance alone is a prominent distinction between cholera and our epidemics. Ill-timed cathartics were the exciting causes of a large proportion of our bad cases. Indeed, many were at first attacked with a factitious diarrhœa, or cholera, which brought on the gastric sinking. Even where the bowels evidently required evacuation, *we were always obliged to stop it after the first or second motion*, or the most sinking symptoms would supervene. The exciting of the peristaltic motion of the intestines by the mildest laxatives, before any evacuation took place, often produced gastric sinking; and the evacuation seemed not to reduce so much by its *quantity*, as by the peculiar *exhausting action* which was produced. Three fourths of the fatal cases which I have seen, in sinking typhus, were evidently the victims of improper purging, or of diarrhœa not speedily checked.

By a letter from an intelligent apothecary in New York, received this morning, mentioning cases that he had seen and known, I am confirmed in the opinion, that nothing efficient is usually done in the stage of collapse. With my views, if I should do so little, I should reproach myself. There appears to be an absolute ignorance of all the low, sinking diseases of our own country, and an unaccountable indifference to acquiring any knowledge of them, among most of the physicians where cholera prevails. It is certain that cold typhoid diseases have never prevailed to any extent in our large cities; the physicians consequently have no personal experience in them, and therefore must acquire their knowledge of them, if in any way, from the writers in the parts of the country where such epidemics have appeared.

I have no doubt that much discrimination is demanded, and that difference in age, temperament, severity, stage of disease, preponderance of particular symptoms, prevalence of irritability or of torpor, &c., demand very considerable variation in practice. In some of our cases, moist heat—in others dry heat, was preferable; and in some no extra warmth was demanded. In some—the irritable, large doses of opium, at comparatively long intervals, as two, three, or four hours, were best, and but little alcohol, essential oils, capsicum, and aromatics, were preferable; and, in these cases, but few blisters and rubefacients were admissible. In the torpid cases, every external and internal irritant was demanded, and comparatively small doses of opium were needed, while the stomach might be kept filled with alcohol. Blisters, *successively*, inside the thighs, were the surest remedy for retention of urine from torpor, or for a defective secretion of it. In a few torpid cases, *strong* tincture of cantharides was admissible, in drachm doses. To make blisters or sinapisms sure to take hold, their surface which touches the skin ought to be freely moistened with oil of turpentine; but as soon as they become excessively painful, the turpentine application should be removed. This manner of blistering by turpentine is very effectual in removing coma. I suspect that strong tincture of cantharides, either made of alcohol or of the best vinegar, would be proper to be applied to the spine, and perhaps over the whole head, in the collapse of cholera.

I am sensible that I make use of strong language, because, in common with all who are familiar with sinking typhus, I feel that the usual treatment of cholera, both in England and America, would prove inert, and absolutely ineffectual, in many of the severe cases of our sinking epidemics, which we have been in the habit of managing with ease and success.—Yours in respect and friendship, THOMAS MINER.

Middletown, Con., July 11, 1832.

DR. BRONSON'S ACCOUNT OF THE CHOLERA IN ALBANY.

Albany, July 12th, 1832.

To the Editor of the Boston Medical and Surgical Journal.

DEAR SIR,—The epidemic cholera has appeared among us within the last few days. The first cases we had of it were on the morning of the 3d instant. At that time, two persons of intemperate habits were taken down with the disease in its worst form, which proved fatal, in each instance, within the course of a few hours. On the 4th, there was another case, and on the 5th two others. All these were of a very decided character. They occurred in distant and unconnected parts of the city, and had no intercourse with each other. They are universally believed to have been of indigenous origin. Every effort to trace them to contagion has entirely failed.

Though I am willing to admit all the *facts* on the side of the anti-contagionists, I am still a decided advocate for the doctrine of *contingent contagion*, as maintained by J. Johnson and others of the present day. I am firmly of the opinion, that cholera may be contagious under *particular* circumstances. I am led to think so not only from what has been noticed here, but from what was witnessed on a much larger scale in Montreal and the other seats of cholera in the north.* The truth seems to be this:—the disease is contagious (the terms contagion and infection are used as synonyms) in crowded, unventilated dwellings, amid filth, intemperance, and poverty, but rarely or never in cleanly, airy apartments, the inhabitants of which are regular and temperate, well fed, and well clothed. Let a cholera patient be thrown into a tenement of the former description, and one half of the wretches about him will be almost sure to sicken within the space of three days; while a habitation at a distance, under precisely the same circumstances, as it regards its location and internal economy, and the habits of those who live in it, will perhaps for the present escape. Numerous instances might be referred to, exactly in point. The manner in which the conclusion derived from them is commonly evaded, is extremely disingenuous, and would be instantly scouted at in any other branch of physical science.

Some weeks before the appearance of cholera among us, there was almost an entire suspension of all other diseases. The state of things resembled the calm that precedes the storm. It was evident that the epidemic constitution was about changing. The complaints that were noticed were strangely anomalous and irregular. They often blended, and produced hybrids, or a more compound disease. Influenza, measles, hooping cough, and scarlet fever (the three former of which were very rife and severe here during the winter), frequently seemed to unite in the same person, producing a disease of such an equivocal character, that it was difficult to tell which element in its composition preponderated. Sometimes a number of cases would occur in a single family, in immediate succession—one of which, had it been an isolated case, would have been called measles; another, scarlet fever; and another, perhaps, influenza, or a kind of sub-pneumonia, &c. Intermittents (which were common) put on unusual appearances; they were complicated, irregular, marked. At last, about three or four weeks before the cholera appeared, complaints began to assume a diarrhœal form, showing distinctly the commencement of a new epidemic constitution. As these became more frequent, and more marked in their character, other diseases gradually disappeared, until they were all lost in the prevailing disorder. They were at this time easily managed, and very rarely assumed a serious aspect. They affected the public health so triflingly, that it was considered a time of unusual freedom from sickness. Physicians had little or nothing to do. The smallness of the number of deaths in our city was almost unexampled.

The commingling of diseases above referred to, producing anomalies of almost every description, as if opposite and contending forces had met, and each struggled for the mastery, was observed during the first part of the present year, in the places which I visited at the north, where cholera has prevailed. Bowel complaints, too, were the immediate precursors of the epidemic, showing, first, the preponderance, and in a short time the complete formation, of the present constitution. Notwithstanding these intestinal disorders, it was a time of general freedom from sickness requiring professional attendance. This fact was so extraordinary in some places, as to excite the surprise of medical men. In St. John's, where cholera raged to a considerable extent, the like had never before been witnessed.—Very respectfully yours,

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* On the breaking out of the cholera in Canada, the writer was despatched, to investigate its nature and treatment, by a number of private gentlemen in Albany.

HENRY BRONSON.

CHOLERA AT QUEBEC.

THE following is part of a letter to the editor of this Journal, from one of the most distinguished physicians in Quebec, and one whose situation in the health department gave him ample opportunities to become intimately acquainted with all the circumstances attending the disease as it prevailed in Canada. We will only add, that the writer is the best possible authority on the subject, and his statements may be relied on as unquestionable. Any further information of importance, from the same quarter, will be promptly laid before the reader.

Quebec, July 9th, 1832.

MY DEAR SIR,—It was my intention to have sent you a copy of the only report (which was drawn up at the request of Drs. Rhinelander and De Kay, who visited Quebec), by Dr. Pillsbury, of Lowell (I think), near Boston ; but his stay was short, and I was prevented from so doing by a press of business. He did, however, obtain some information, which, at my request, he promised to communicate to you. The following are the facts of all that is really yet known of the introduction of the cholera among us. A report was sent from Grosse Island, stating their fear that cholera had existed on board the Carricks during her passage. I was in consequence requested to leave town, visit the vessel, and report, which I did :—that she had left Dublin in April, and that 39 persons had died on board, the first four weeks of her passage, with a disease, if not cholera, much resembling it, and that the last death was on the 8th May, nearly one month before her arrival. The vessel was ordered to perform strict quarantine, the passengers to be landed, washed and cleaned, and the vessel purified ; all which was done. I returned on the 6th June, and on the 8th a doubtful case was reported to me by Dr. Perreault, the then resident physician (who has since fallen a victim to the disease). He had taken notes, but they are not forthcoming. Report states this man to have been about town some time. The second case (if the first be admitted) was on the afternoon of the 9th—taken ill on a wharf while working, sent to the hospital, and died. Both these individuals lodged in Champlain Street. The same evening, four other cases were reported, sent to the hospital, and died. It was ascertained that five out of the seven first cases were return passengers from on board the Voyageur steam boat, which boat had got passengers from on board of two or three different emigrant vessels in the river : bad weather coming on, the boat had to return* and land about 200, they finding lodgings principally in that part of the town where the disease broke out and committed its greatest ravages. I must say the first case was considered by Dr. P. as a severe case of the cholera of the country, and the Voyageur proceeded to Montreal, not aware of leaving cholera behind her in Quebec. Before her arrival at Montreal, one case died on board, and a second very ill; and the two first cases which appeared on shore in Montreal were, I am credibly informed, from on board the boat. Indeed, the captain verily believes he received it from on board a vessel (which, for reasons, I will not name at present). The facts and history of the first twenty cases we have commenced collecting, and if anything transpires worth sending you, I shall not forget it. *All things considered, I am satisfied the disease is contagious;* at what period, or under what circumstances, I am not prepared to say.

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* On the evening of the 7th.

In support of my ideas of contagion, I will quote the following facts: as attending physician at the time, I recommended to the religious ladies of the Quebec Hotel Dieu Convent, certain precautionary measures, like exclusion of visiters, strangers, &c., which were adopted, and there was *no disease* there. The military alluded to in the report are still free from disease; whereas, in Montreal, where there is no citadel or barracks, and soldiers could not be confined, their loss was as great, in proportion, as that of the inhabitants. They were soon sent to an island near Montreal, and have had little or no sickess since. At Beauport, a populous village which crosses the river St. Charles, cases occurred almost as soon as in town. The first four were masons, who had been working in the Cul-de-Sac, in St. Paul's Street, during the Friday and Saturday, and on Sunday, while at church, one, the first, was attacked; on Monday, three others, and in less than a week, upwards of 40. Mr. Racey, formerly of New York, and who had just returned from Europe, embarked on board a schooner, to go down the river to his family at Matan, about seventy leagues below Quebec. He was taken ill the evening before his arrival at home, and the third day after his departure from town. He died a few hours after he reached his family. In less than three days from his own death, two of his children died. It was unknown at Matan that the cholera existed at Quebec, when Mr. R. arrived. I must close here at present; when a little more at leisure, I will trouble you again on this subject.—Yours, &c.

The following copy of a report, drawn up for the use of the New York Medical Delegation, accompanied the above letter.

Board of Health, Quebec, June 25th, 1832.

The undersigned, appointed by the Board of Health to investigate and report upon the introduction and treatment of the cholera, now existing in this country, have agreed to the following Report, which they respectfully submit.

The disease, on its first appearance in this city, exhibited all the characters of that commonly called the Asiatic or Spasmodic Cholera. It commenced about the 8th instant, in boarding houses and taverns in the Cul-de-Sac—a low, uncleanly, and ill-ventilated part of the city—

crowded with emigrants of the lowest description, with sailors and other persons of irregular habits.

About the fourth day of the disease (the 12th), it showed itself in the more elevated parts of the city, among the wealthier classes of society, and persons of sober and regular habits, who could have had but little, if any, direct communication with the people among whom the disease had first appeared.

About the same date (the 12th), the disease was observed in various parts of the city, and in several neighboring parishes, some few miles distant, having a constant intercourse with it.

The cases continued to increase in number until about the 16th or 18th (being the 8th or 10th day of the disease), when they began to subside, both in number and in violence—the disease still prevailing more extensively in the ill-ventilated parts of the city above mentioned. About the period of its greatest prevalence (the 8th or 10th day of the disease), the number of cases was estimated to be between 250 and 300, in the course of 24 hours.

The undersigned have not as yet been able to discover that any case of cholera has been landed from any vessel in the harbor, before, nor until several days after, its first appearance in the city.

They deem it necessary to add, that some parishes in the neighborhood of Quebec have continued free from the disease until lately, and that no case appears to have yet occurred at Three Rivers, an intermediate and populous town between Montreal and Quebec, where the steamboats with emigrants, from Quebec, generally arrive.

Since the appearance of this malady, only two soldiers have been attacked in Quebec, and those while on duty—the rest being closely confined to their quarters.

The symptoms were the most violent at the commencement, and continued so until about the 16th or 18th, when they began to mitigate in severity, as the cases diminished in number.

In the treatment of this disease, recourse has been had to almost every remedy favorably reported of by European practitioners, and they all have had, for a time, their advocates—some preferring stimulants, others opiates, while others satisfied themselves with an intermediate plan of treatment—the whole of the medical practitioners with one accord agreeing, however, in the application of external stimulants, such as oil of turpentine, mustard, warm applications and frictions; calomel and opium have been much relied on by many. Practitioners speak with confidence of bloodletting at the onset of the disease, and before an approach to collapse has been recognised. Sweating has been much practised, and decidedly with advantage, when it is not allowed to run into that state of collapse indicated by a pulseless wrist, dejected countenance, blue extremities, tongue and breath cold, and a sunken voice, feeling as if it passed through the ears.

Some instances have been noticed, and also observed by our intelligent clergy, as well as by ourselves, where, in some mild forms of the disease, nature effected a cure by copious perspiration, encouraged by warm drinks and extra clothing.

The undersigned, with one accord, have found purgatives injurious, if used before perspiration or bloodletting had been resorted to, to allay the irritable state of the stomach and bowels; and then only the milder purgatives should be employed, such as calomel or blue pills, guarded with minute doses of opium, and carried off, after a few hours, with rhubarb, combined with soda and carbonate of ammonia.

Signed, Jos. Morrin, Health Commissioner; W. A. Hall, Resident Physician; F. X. Tessier, Health Officer; Wm. Lyons, Superintendent of the Emigrant Hospital.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, JULY 25, 1832.

ACTION OF EMETICS.

[Continued from p. 290.]

9. Having heretofore considered, at some length, the therapeutic effects of emetics, it remains to make a few remarks on those which cause them, under certain circumstances, to be regarded with apprehension. Of these, the first is the increased activity which they are supposed to produce in the cerebral circulation. That, under the operation of emetics, symptoms occur of powerful determination of blood to the head, is beyond all question. The vessels of the face become distended, and a flush is produced, which cannot escape the attention of the most cursory observer. Whether the state of the cerebral vessels correspond to this, and whether, under the influence of an emetic, congestion of these vessels is produced, is rather more doubtful. The invariable tendency of vomiting to relieve headache, when this symptom is present, is one argument at least against such a supposition; for admitting that, in the majority of these cases, this symptom indicates gastric disorder, yet it can scarce be questioned, that the pathologic state of the train which accompanies it is that of increased cerebral circulation; and, were it the direct and constant tendency of vomiting to augment the vascular action in this organ, we might expect to find the symptom in question rather aggravated than relieved. As it is, the violent muscular action, which accompanies the process, sometimes tends directly to produce this effect; but this is so immediately counteracted by the opposite and more permanent influence, that it is not ordinarily taken into consideration in forming an estimate of the effect of the remedy. The considerations above stated may at least tend to modify the apprehension which is commonly entertained of administering emetics to those who, from plethora or other causes, appear to have a tendency to affections of the brain. We are satisfied that experience does not justify this apprehension. It may indeed have happened, that, in subjects peculiarly predisposed to

apoplexy, this affection may have followed on the use of emetics. But such instances certainly must be very rare. We do not at this moment recal a single instance which has come to our knowledge, either in our private intercourse with practitioners, or through the medium of the public journals ; and this, in regard to a remedy in such daily and constant employment, goes as far as negative proof is capable toward actual demonstration. With respect to the utility of giving emetics in apoplexy, the question must be determined on general principles, and with reference to the result, cause, and other circumstances, of a given case : but we hold it to be a clear inference, from the reasoning above adopted, that, where apoplexy arises from excess, and is connected with overloaded stomach, the fear of increasing the congestion would be a very mistaken reason for neglecting a remedy capable of removing the cause ; and we have our doubts whether, under these circumstances, the employment of bloodletting, as a measure of precaution, be necessary or expedient.

10. The last effect of emetics which we shall notice, is their reputed tendency to produce abortion. This we apprehend, like the last, to have been on the whole somewhat overrated. No doubt severe vomiting, by the disturbance which it occasions in the system, will occasionally interrupt the function of gestation ; and this is equally true, if not more so, of the operation of severe and drastic purgatives. It is beyond question, too, that both these remedies are frequently resorted to for the very purpose of procuring this effect, and that, too, under circumstances in which any remedy, that presented a probability of success, would be likely to receive a full and fair trial. Yet we do not find that the means thus obviously furnished, and so conveniently within the reach of all disposed to employ it, is often resorted to with success ; though facts of this kind, if of frequent occurrence, would hardly fail to come to the knowledge of the profession. Further, it is to be remembered how often severe vomiting is a symptom of the puerperal state at its earlier stages, and that instances have been known where this symptom has followed obstinately through a great part of its course ; sometimes, indeed, from the distress which it occasioned, making it necessary to produce abortion by other means. A still more striking argument may be gathered from the fact, that, of the 10,000 emigrants who annually cross the ocean to swell the population of our happy country, one twentieth at least are pregnant women ; and if vomiting in any form could, with tolerable certainty, produce the effect, we think it must be that which would occur among such subjects, crowded together in such untoward circumstances. The fact, however, is, that this event is by no means frequent, and the hazard of its occurrence forms but a small portion of the terrors with which the mighty deep is armed, to those placed in this situation.

The excess of apprehension, to which we have alluded, might be regarded as harmless, or even useful, if it induced simply to caution in regard to excess in diet, and other causes calculated to induce spontaneous vomiting. But, if we mistake not, both practitioners and their patients are too often induced to forego the benefits to be derived from artificial vomiting, in cases in which it is evidently indicated, from the fear of interrupting gestation. That this apprehension is often unfounded, experience itself sufficiently shows; since it frequently happens, that, after all other remedies have been tried without success, the emetic is finally resorted to with the happiest effects. There is, in fact, a certain state of the system, to which we have already alluded, and which, in many constitutions, is of periodical recurrence, which can only be relieved by the exhibition of this remedy; and, where the period recurs during the period of gestation, we have only the choice between a protracted and tedious employment of feeble remedies, until the process has terminated or the disease has exhausted itself—or, on the other hand, the exhibition of the same remedy which, in the ordinary state of the system, is found to be effectual. The considerations which weigh, in such a case, are numerous, and the decision is frequently a matter of no small difficulty. Much will depend on the intensity of the symptoms, and much on the degree of advancement of the pregnancy; for, if this state has nearly terminated, it may perhaps be better to endure the evil than to incur the hazard, however small, attendant on the remedy.

CHOLERA IN GLASGOW.

An interesting account of the disease, as it appeared in Glasgow, is given by Dr. Auchinloss, of the Tuon's Hospital. The disease commenced on the 22d February, and continued to prevail till the 9th of March, during which time, 62 patients were attacked, and 2 subsequently. The number of deaths was forty. The mode of introduction, as usual, was a subject of debate. Dr. A. is induced to attribute it to the vicinity of a dunghill, or to the presence of dampness in some of the cellars, owing to occasional inundations from the river. Of the cases, 5 were nurses who attended on the sick, and of these 4 died. The symptoms of the disease were much the same as have been already described. Among remedies, the following stimulating draught was much used :—

Brandy, ℥ss.; Tinct. Caps., gtt. v.; Tinct. Zing., ʒi.; Spi. Eth. Nit., ʒi.; Ether Sulph., gtt. x.; Aquæ Cal., ℥i. M.

In the stage of vomiting and purging, some benefit was derived from mustard poultices. Where these failed, the supercarbonate of soda was sometimes given with advantage. Dr. A. was not satisfied of the utility of bleeding. Good effects were occasionally produced by the application of a plate of copper, heated in boiling water, to the surface of the abdomen. In this way, vesication was sometimes instantly produced. Frictions with hartshorn and other stimulants were found useful.

On dissection, the peritoneal surface of the bowels was found vascular, with more or less tenacious matter on the surface, and different folds of small intestines adhering together. Mucous surface of the latter generally natural, but in one or two cases distinctly inflamed, especially toward inferior extremity. Large intestines usually contracted, especially colon; in many cases empty, and sometimes containing feculent matter, and, at other times, masses of white, cloudy matter, floating in a large quantity of pale fluid. Stomach usually distended, containing dark greenish matter; mucous surface red and softened—sometimes distinctly inflamed. Liver generally natural, or slightly enlarged. Gall bladder, in every instance, full of dark-colored viscid bile.

Some cases are contained in the same Journal of the use of the strychnine in cholera. This remedy was first employed in Germany, under the idea that the seat of the disease was the spinal marrow. The result of the practice in Glasgow was not very decisive. It was chiefly given in those cases which were considered the very worst—those in which the symptoms of collapse were the most perfect, and where every other mode of treatment was considered totally hopeless. The patients who took the medicine under these circumstances lived longer than the others who did not. The doses given were about a quarter of a grain each, repeated at intervals of about an hour. There is, then, some reason to suppose, that, in milder cases, the administering of the medicine in large doses might have the effect of removing the symptoms of collapse, by acting specifically on the spinal nerves, the defective function of which may be regarded as the great cause of the suspended circulation, and the other symptoms of collapse.

THE CHOLERA.

Our pages this day will be found enriched by authentic and interesting details on the subject that engrosses the attention of the faculty. In the report, published in connection with the letter from Quebec, it will be noticed that allusion is made to the situation and immunity of a village called *Trois Rivieres*, or Three Rivers. An inhabitant and magistrate of that place has transmitted to the Mayor and Aldermen of this City, an account of the method adopted for the purpose of preventing the ravages of the disease, which consists in the burning of brimstone, the internal use of sulphur—a drachm in a little molasses—three times a week, and the wearing the same article about the person.

We would remark on the above, that, so far as the burning of sulphur, under such circumstances, tends to destroy infection, but one opinion can exist among intelligent men; we would, however, caution the public against the indiscriminate internal use of this article, or any other purgative, at a period when an epidemic of the description of the cholera exists or is expected. If the digestive organs perform their functions with regularity, it would be extremely unwise to interfere with them by the introduction of any species of medicine. The village of Three Rivers is said to contain about 3,000 or 4,000 inhabitants.

At New York, the cholora still prevails rather extensively. On the 15th, there were reported 113 cases and 59 deaths; on the 16th, 148 cases and 77 deaths; on the 17th, 123 cases and 48 deaths; on the 18th, 124 cases and 58 deaths; on the 19th, 198 cases and 70 deaths; on the 20th, 188 cases and 84 deaths. At Bellevue Almshouse, there were 20 cases and 15 deaths on the 15th; 21 cases and 17 deaths on the 16th; 23 cases and 12 deaths on the 17th; 14 cases and 14 deaths on the 18th; 11 cases and 12 deaths on the 19th; 28 cases and 10 deaths on the 20th. On the 21st, whole number of cases, in the City and Almshouse, 311; deaths, 104.—For the purpose of obtaining more full reports, the authorities have now imposed a fine on any medical gentleman who shall neglect to report a case coming under his care.

We learn from a medical friend, who has just visited all the cholera hospitals at New York, that, at one of the institutions, a mode of treatment has been adopted, which proves more successful than any hitherto tried. It consists in withholding all internals, save only moistening the mouth with barley water, folding the patient closely in thick hot blankets, and applying vigorously, over the whole surface, friction with an ointment composed of blue ointment lb. j., camphor lb. ss., capsicum lb. $\frac{1}{4}$, mixed. For the last three days, the loss under this treatment had been one a day, although about 30 patients were in the hospital.

A man died last week, after an illness of a few hours, on his passage from New York to this city, on board the new steam boat Chelsea. It was supposed to be a case of cholera. There were only five or six persons on board, and as yet no other case has appeared among them, although they are all detained at quarantine, and the boat has been fumigated.

Monthly Notice of New Publications.

The Principles of Medicine, founded on the Structure and Functions of the Animal Organism. By SAMUEL JACKSON, M.D., of Philadelphia. Carey & Lea, Philadelphia, 1832. pp. 630.

DR. JACKSON is well known to the medical public, as the author of some excellent articles in the American Journal, published at Philadelphia, and particularly one on Absorption, in the tenth number of that work. The present production, however, is elaborate and finished, and will, we think, obtain for him a permanent and enduring reputation. Its plan may, in some respects, be regarded as new. Its object is to connect, in one view, the subjects of physiology and medicine, in such manner as mutually to illustrate each other. The work commences with a treatise on general anatomy, in which the several tissues or systems are successively considered. Then follows a chapter on the fluids and their pathological states. The vital properties of irritability, and vital affinity, and the organic actions, are next considered. To these succeed the functions:—1st, of relation, as those of sensation and voluntary motion, with their respective pathologic states, together with the intellectual and moral faculties, and the disorders incidental to them. Under this head, Dr. J. considers the expressions, including physiognomy and voice, and likewise the subject of sleep and dreams: 2d, the organic functions, as that of digestion, both in its healthy and morbid state; of absorption; of respiration, with its diseases; of circulation, and of nutrition. Such is the extensive range of subjects embraced in the present work, and the principle of arrangement which pervades it. We shall not attempt a more detailed account of this valuable and able production, since we should be entirely unable to perform such a task to our own satisfaction or that of the reader, within the limit which we are able to afford these notices the present month. We will merely mention, that, as a specimen of Dr. J.'s manner, and of the clearness and brevity with which he treats the more abstract branches of his subject, we would refer the reader to the treatise on sleep and dreams, which forms the concluding chapter of the first part.

Principles of Physiological Medicine, in the form of Propositions, embracing Physiology, Pathology, and Therapeutics, with Commentaries on those relating to Pathology. By F. J. V. Broussais. Translated from the French, by Drs. Hays and Griffith, of Philadelphia. Carey & Lea, Philadelphia, 1832. pp. 594.

We are indebted to the Philadelphia physicians for numerous well executed translations of French works, of which this is no unfavorable specimen. From the peculiarity of the views adopted by Broussais, and the boldness of the language in which they are expressed, it is no easy matter to do his work justice by a translation. Even to the reader of the original, there is an obscurity and want of precision about the style, which makes it difficult to seize precisely the idea intended to be conveyed. In such, the embarrassment to the translator is very great, as he has only the choice between substituting a phraseology of his own, to express what he may conceive to have been the idea in the mind of his author, and thus exposing himself to the charge of unfaithfulness—or, on the other hand, retaining all the expressions in a literal version, and incurring the blame of a fault which is, in fact, chargeable only to his author. Considering the nature and amount of these obstacles, we think Drs. Hays and Griffith have acquitted themselves with singular ability.

The mode of printing is exceedingly convenient, the leading propositions being in a large and plain type, while the commentary is smaller, and more compact. To those who, in these times of bustle and excitement, can spare but a short time, from other engagements, for the reading of heavy octavos, we recommend the careful perusal of propositions 12, 112, 113, 138, with their respective commentaries, as containing much of what is most peculiar in the author's views and doctrines. To others, however, whose taste directs them to the theory of medicine as a study, and who have leisure for the occupation, every portion of the book will possess strong attraction; and, whatever difference of opinion may exist as to the correctness of the views in question, all must agree in conceding to the author the credit of uncommon natural vigor, assisted and improved by close and diligent investigation into the nature and phenomena of diseased action.

A Rational View of the Spasmodic Cholera, chiefly with regard to the Best Means of Preventing it. By a Physician. Clapp & Hull, Boston. pp. 36.

This little tract recounts, in a small space, and urges with good earnestness the adoption, by the individuals for whose benefit it is written, of all those means of *preventing* an attack of cholera, which experience has proved to be most effectual. It is designed to circulate among and enlighten that class of persons most subject to the disease, and is suited, by its plain language, brevity, and cheapness, to the purpose thus intended. The various causes and the medical treatment are but casually adverted to. *Prevention* is the burden of the book, and, even if it serve no other useful purpose, it will prove valuable as a temperance tract. We hope it may find its way whither it is sent by the author.

Whole number of deaths in Boston for the week ending July 20, 27. Males, 12—Females, 15.

Of consumption, 1—intemperance, 4—unknown, 1—infantile, 1—dropsy, 2—scarlet fever, 3—mortification in the bowels, 1—dropsy on the brain, 1—measles, 2—spasms, 1—teething, 1—abscess on the brain, 1—palpitation of the heart, 1—erysipelas, 1—liver complaint, 1.

ADVERTISEMENTS.

Just Published, at the Office of the Boston Medical and Surgical Journal, "A RATIONAL VIEW OF THE SPASMODIC CHOLERA, chiefly with regard to the Best Means of Preventing it. By a Physician." The purpose of the writer has been to embody, in a plain, practical form, all the important facts and suggestions, in regard to the prevention of Cholera, which have been developed in its march through other countries, and in its progress thus far in our own. These have been so condensed as to form a manual which, from its cheapness, may be within the reach of those to whom, on account of their condition and circumstances, it is most necessary.

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VOL. VI.] WEDNESDAY, AUGUST 1, 1832. [NO. 25.

THE LATE BARON CUVIER.

WHILE France and learned Europe are still engaged in deploring the loss of this illustrious man, and in pronouncing splendid eulogiums upon his memory, we shall take this opportunity of paying our simple tribute, in the shape of a summary of his life and labors : even the briefest record of these must constitute no mean monument of his fame.

GEORGE CUVIER was born at Montbeillard, in the year 1769. Yet he was, strictly speaking, not a Frenchman. Montbeillard, at the period of his birth, and for more than a quarter of a century after, belonged to the Duchy of Wurtemburg ; it was eventually included, by republican France, in the newly-formed department of the Upper Rhine. The father of M. Cuvier was a Swiss : after serving for forty years in the French armies, and attaining the rank of a chevalier, he retired on a pension as commandant of artillery at Montbeillard.

The capital of Wurtemburg was chosen as the scene of young Cuvier's education. At Stuttgard he devoted himself to the study of mathematics, philosophy, law, and jurisprudence ; and it deserves to be noted, that the chief object of the courses laid down for him was to qualify him for a place in the administration, for his family is said to have had some interest with, and some claims on, the reigning Duke Charles. But the French Revolution produced great changes. We find our student suddenly transferred from Stuttgard to the coast of Normandy. At Stuttgard he is known to have derived, from the mountainous scenery and other local peculiarities, many of those impressions which were afterwards so admirably developed in his maturer views of natural history ; and at Stuttgard too he had tried his strength in the various learned societies which were found there. Removed now to his Norman residence, in the 20th year of his age, as a tutor in the family of a French nobleman, he had his first opportunity of indulging in those favorite pursuits which ultimately stamped him as perhaps the greatest naturalist the world ever saw. It was not long till he had dissected, described, and drawn, almost all the fishes that were to be met with on the coast of La Manche ; and here it was that he made his grand and original observations on the structure of the molluscous tribe.

We next find him in Paris, engaged as a private lecturer. He was soon appointed as an assistant to Professor Mertrud, in the courses of comparative anatomy at the Museum of Natural History ; and immediately admitted a member of most of the learned societies of the French metropolis. Of the Institut, which was organized in 1796, he was one of the earliest members; and the numerous memoirs and discoveries which he laid before that body, rapidly extended his reputation, while they formed the bases of many of his subsequent publications. Before he was 29 he received the Chair of Natural History at the Ecole Centrale; and in 1798 published his first separate work—the *Tableau Elementaire de l'Histoire Naturelle des Animaux.* This was the basis of the *Règne Animal;* it presented a new arrangement of the whole animal kingdom—the principles of which, however, had been already given by him in a memoir on a new division of the white-blooded animals, written at the age of 26, when *he first* ventured to attack Linnæus's division of the invertebrata into the meagre and confused classes of insects and worms. His own division, at the same time it should be noticed, of invertebrated animals into the three now well-known classes, was not adopted by him until the year 1812.

In the meantime, the materials of his courses of lectures on comparative anatomy were attaining a vast extent, and he determined to give them to the public. With this view they were reduced to form by his two able assistants, MM. Dumeril and Duvernoy; and, in 1800, were accordingly published as the first two volumes of the *Leçons d'Anatomie Comparée.* M. Cuvier was himself engaged, during the compilation of those volumes, with the excavations of the gypsum strata of Montmartre, and the comparison of the bones discovered there, with the skeletons in the Museum. In the remainder of the work, which appeared in 1805, the parts which relate to the organization of insects and molluscous animals were exclusively his own; and probably no other anatomist then living was equally qualified to undertake those obscure and difficult subjects of zootomy. The Leçons altogether are known to comprise the most perspicuous, correct, and complete systematic view of the science to be found in any language.

He succeeded Mertrud, in 1802, in the professorship of comparative anatomy; and here we cannot help pausing for a moment to contemplate the wide—the magnificent—range which he allowed himself, in the pursuit of his favorite science. Had his researches in comparative anatomy been conducted only in connexion with human, his illustrations and his contributions to the science could scarcely have extended beyond a few classes in the animal kingdom. If in connection with geology alone, his knowledge would have been mostly limited to the hard parts. Zoology, unaided by his general acquirements in comparative anatomy, would perhaps have been in danger of suffering additional confusion of arrangement. But with his unrivaled combination of qualities of mind, and ardor in the pursuit of all those collateral investigations which should be brought to bear on the one great end in view, M. Cuvier was enabled to attain a degree of excellence, as a comparative anatomist, which has never yet been equaled, and, in the lapse of ages, may possibly be long ere it be surpassed.

When Buonaparte returned from Egypt, and, after having been declared First Consul, was vain enough to permit himself to be chosen President of the Institut, Cuvier, who was one of the secretaries of that body, was necessarily brought into frequent intercourse with his future sovereign. The grand scheme of organizing the schools of France made this intercourse still more intimate, and Cuvier was appointed one of the six Inspectors General, whose business it was to establish Lyceums in the thirty principal cities of the kingdom. It was while on this mission, at Marseilles, that he so profitably employed his leisure moments in investigating the ichthiology of the Mediterranean.

Those examinations of the Montmartre strata, constitute an era in geology; they were the continued labor of many years, and were crowned by the publication of the *Recherches sur les Ossemens Fossiles*, in seven volumes, 4to. 1812–1824. In this great work M. Cuvier embodied not only the information which he derived from his personal inquiries in the neighborhood of Paris, on his several visits to the interior of France, and on his missions to Italy and Holland, but the abundant stores of knowledge which he procured from the correspondence of the most distinguished naturalists in all parts of Europe. The success of his labors in identifying the fossil bones of the mammali, deservedly obtained for him the highest celebrity, while it afforded the most convincing proof of the utility of zootomical knowledge, as applied to geological investigations, that has ever been found in the records of science. No naturalist, indeed, ever enjoyed such opportunities as M. Cuvier for those particular researches; but perhaps no man ever possessed, in a more eminent degree, all the requisite qualifications for their successful employment. His indefatigable industry and enthusiasm—his extensive general knowledge—the beauty of his language, and the elevated tone of his descriptions, with the grandeur of his views, and the sublime truths which they unfold, regarding the past revolutions of the animal kingdom and the globe we inhabit, must convince every one that there was really no other individual living who could have so successfully performed what he accomplished in regard to the restoration of extinct species.

We shall not attempt, in this limited sketch, to introduce any further remarks relative to the *Ossemens Fossiles*; nor do we think it necessary to more than allude to the eloquent *Preliminary discourse* with which the work commences,—a discourse which, even had its author never written anything else, would have perpetuated his name to a late posterity. It has been translated into several languages, and the English version, by Professor Jameson, has gone through several large editions.

In 1808 Cuvier was appointed one of the Councillors for life of the newly-erected Imperial University—an office which gave him frequent occasions of discussing political affairs before the Council of State and in presence of the Emperor. He was sent, in 1809–10, to organize the academies of the Italian states; and his arrangements at Turin, Genoa, and Pisa, were found so advantageous that, on the return of the sovereigns of these states, the numerous measures adopted by Cuvier were preserved inviolate. Subsequently, in Holland and the Hanse-towns, the changes and nominations which he made were similarly respected and preserved; and, what is still more worthy of being recorded, though a protestant by country, birth, and education, he was yet sent, in 1813, to reorganize the University of Rome; and many of his improvements in La Sapienza were retained even after the return of the Pope.

It might be thought that the labor of collecting materials for such a work as the Fossil Organic Remains, and the task of arranging and describing them, were sufficient to have occupied the greater portion of M. Cuvier's life: but we have seen what some of his other occupations were, and to these we shall now add one fact more, relative to the work just alluded to. M. Cuvier found leisure not only to execute the drawings for, but even to engrave with his own hand, some of the most detailed osteological plates which adorn the several volumes.

But we have still other works of his to notice. His writings and researches were by no means confined to topics connected with the animal creation. He was in the habit of collecting, in his *leisure* hours, the most interesting historical facts illustrative of the progress of science, and of examining the scientific labors, and composing biographical memoirs, of the eminent members of the Institut, for many years back. Of these memoirs, a collection has been published in three volumes, and they serve perfectly to establish his claim to an acquaintance with *all* the physical sciences, and the march of discovery in each of their various departments. The style in which they are written is easy, elegant, and perspicuous, and not a murmur has ever been breathed against their strict impartiality and truth.

The *Règne Animal* made its first appearance, in four volumes, in the year 1817—a work which is universally allowed to constitute the best outline of the present state of zoology and comparative anatomy. It was here that he may be said to have ultimately adopted his quadripartite division of the animal kingdom, after an experience of thirty years. Faults have been found, it is true, with this somewhat arbitrary division. It has been even characterised as not very uniform or philosophical, and as perhaps too much fettered by the author's early ideas of classification. But, on the whole, it is allowed to be a classical work, and is justly adopted, as the great standard of reference, by the ablest naturalists of every country. We need be the more brief in our notice of it, in consequence of its being, after the Preliminary Discourse, that work of M. Cuvier's which is perhaps best appreciated by the English public.

It is pretty generally known, that the great undertaking on which his heart was set to the last moment of his life, was a complete system of comparative anatomy. For this vast enterprise, which he intended to surpass all that he had yet achieved, and to which he has alluded in all his publications—which was, in fact, the great study of his life, and the idol of his thoughts, during nearly his whole career—he had prepared an immense series of drawings and engravings; and, indeed, the Museum of Comparative Anatomy owes its origin to his strong desire of accomplishing this beloved object. What he has done for the class of fishes—and which he always looked upon as by far the most important of all his contributions to the natural history of vertebrated animals—may [illegible] contemplated as an earnest of what he would have done. It is said that he and Valenciennes, his colleague, had collected materials for an account of above 6,000 species of fish, 5,000 of which, it was calculated, would occupy the space of not less than twenty octavo volumes.

We have now noticed, however briefly, the principal scientific occupations of M. Cuvier ; but, vast and all-engrossing as they seem, they must be absolutely considered as the pastime of his leisure, when taken in connection with his functions in the state. Those functions, in fact, he always considered as his original destiny—the business to the conduct of which his early education was directed. He was about to be named a Councillor of State by Napoleon, when the events of 1814 occurred to prevent that high distinction. It was, however, delayed only ; for in that same year he was named to the office by Louis XVIII. In 1815, he was retained as a member of the Commission of Public Instruction, and charged with the chancellorship of the university. During the "hundred days," his connection with the Council of State was suspended ; but even then he continued to hold his important situations connected with public instruction.

From all cabals and political intrigues, M. Cuvier ever kept aloof—a course of conduct which was sure to gain for him, as it did, the insidious hostility of numerous partisans. He was chiefly engaged with state business relating to the administration of the interior, and the regulation of the non-conformist religious sects ; and, besides this, was entrusted as King's Advocate, to defend before the Chambers all the principal projects of law.

It was while on a scientific visit, some years ago, to England, that he was apprised of his having been elected, during his absence, one of the Forty—constituting the Academie Française—the highest distinction that pre-eminent talents can obtain in France or in Europe. Soon after, he did not hesitate to decline the Ministry of the Interior, being dissatisfied with some of the terms on which it was offered to him. In 1819, he was named President of the Interior of the Committee of the Council of State, a place which he was anxious for, as unconnected with intrigue, but demanding method, constant activity, rigid discharge of duty, and a thorough acquaintance with the laws and principles of administration. He was created a baron after this, a spontaneous mark of favor from his sovereign, and received several orders, both from the King of France and the King of Wurtemburg, his early protector.

But we will not attempt to enumerate the various honors and marks of distinction heaped upon Baron Cuvier from all quarters, as for a like reason we have not ventured even to allude to all the various publications to which he contributed his powerful assistance ; either attempt would fill several pages of our journal. We must even now draw our brief notice rapidly to a close.

With all his mighty achievements in science, and almost every branch of human knowledge, no man, were one to judge from his personal bearing, would seem to have achieved less. In the enjoyment of competent wealth, influence, profound learning, and the highest fame, M. Cuvier's easy and unaffected manners never failed to command the love and esteem of all who had the honor of enjoying his acquaintance. Many in England, which he again visited not very long ago, will ever remember him with veneration and delight. His very look was calculated to impress respect and admiration. In his domestic circle, his deportment is described as having been amiable to the highest degree.

The circumstances of the death of Baron Cuvier we shall append in some detail. His funeral honors were performed with unusual magnificence. They were attended by not less than between four and five thousand persons, including all those who were of any literary or scientific pretensions in Paris ; and the orations pronounced over him, by the representatives of the different learned societies with which he was connected, were remarkable for their number and impressive eloquence. Their theme could not have been a more fertile one ; for their illustrious subject was universally admitted to have been guided in his great career by nothing but the pure love of knowledge, and the ardent desire to benefit his race. His labors, in a word, will merit the gratitude and command the admiration of posterity.—*Medical Gazette.*

[An interesting account of the last sickness and of the death of Baron Cuvier will be given in a future number.]

SPONTANEOUS EVOLUTON OF THE FŒTUS IN UTERO.

Case of Spontaneous Evolution of the Fœtus in Utero, after the Liquor Amnii had been discharged, and the Uterus contracted. By SILAS JAMES, M.D.

[Communicated for the Boston Medical and Surgical Journal.]

THE term spontaneous, as here used, was first employed by Denman, for expressing the series of effects terminating in an evolution of the child, wholly independent of the practitioner, and it is now employed by all writers on obstetrics. The fœtus in utero was, by Hippocrates, compared, in shape and movement, to an olive in a bottle having a throat large enough only to allow it to pass lengthways. When the shoulders or sides of the body present, delivery is prevented until the child turns one or the other of its extremities to the os uteri, which we are directed to assist the uterus in accomplishing, by pressing the head and upper part of the trunk upward, and then bringing down the lower extremities, so as to make a footling case of it. Authors have differed in opinion as to the most suitable time for endeavoring to accomplish this by manual effort. Baudeloque and Hunter recommend its being done the moment after the waters are discharged, the os uteri being dilated. Clarke advises its being done before the membranes are broken, and says if we take it when the os uteri will admit the finger and knuckles, it is the better time, because we then turn the child as if in a bucket of water. These directions, however, do not apply to cases where the practitioner, when first called, finds the waters have been long discharged, and the shoulder of the child is jammed at the superior aperture of the pelvis. Here we are directed to pass the finger and thumb, in the form of a crutch, into the armpit of the child, in order to raise the body towards its head, and towards the fundus of the uterus, till it has sufficiently moved out of our way to allow of the introduction of the hand into the uterus. But in some cases, when we are first called, the shoulder, says Denman, is so far advanced into the pelvis, and the action of the uterus at the same time so strong, that it is impossible to raise or move the child, which is so strongly impelled by the pains as to overcome all the force we are able to exert. "This impossibility of turning the child, has, to the apprehension of all writers and practitioners, left the woman without any hope of relief." "But in a case of this kind," continues Denman, "I was so fortunate as to observe, though it was not in my power to pass my hand into the uterus, to turn the child, that, by the mere effect of the action of the uterus, an evolution took place, and the child was expelled by the breech." The following case was equally as hopeless as the above, and demonstrates the great power possessed by the uterus to overcome what were, before the time of Denman, considered as insuperable obstacles to safe delivery.

I was called to deliver Mrs. B., a lady of small stature and narrow pelvis, who had been attended in labor, during the previous twelve hours, by a young practitioner, who had discovered an arm presentation of the child. The waters had been discharged some days previous. I found the right arm without the os tincæ, in a situation for the palm of the hand to receive mine as in shaking hands. Her pains were severe and regular. It was concluded to attempt turning, preparatory to which, I gave her 80 drops of laudanum, and, after a third dose of that quantity, succeeded in allaying the pains and inducing drowsiness. After preparing the hand, I attempted to introduce it, and found the fœtus lying across the brim of the pelvis, and pressed so hard, that it was impossible to return the arm to remain any longer than while held with my hand, and that the child was in all respects immoveably fixed ; nor was it possible, on account of the long evacuation of the water, and hard contraction of the uterus, to introduce a finger, although, at the time, no uterine pains existed. The case was then left for a time to nature, and a gentleman of distinguished skill, Dr. Eldredge, was called in consultation. After a few hours, the pains returned in regular succession ; and on his arrival we proceeded to examine again, and, to our great satisfaction, found that nature, unaided by art, had accomplished an evolution, and the woman was safely delivered.

West Greenwich, R. I., July, 1832.

THE SPOTTED FEVER AND THE CHOLERA.

[We gave some account, at the time, of the disease that has recently prevailed in New London. The following communication derives additional interest from the fact that its author saw and treated many of those cases. We should be pleased if he would give us a further account of the symptoms that corresponded and those that did not, and also of the precise treatment that was found so successful in the New London epidemic. Our thanks are due to Dr. Miner for his attentions.]

Middletown, Con., July 25, 1832.

Mr. Editor,—You will oblige me, and probably the public, by publishing the following letter. It is from a gentleman who has lately had very extensive experience in the treatment of a sinking disease which bears a close analogy to malignant cholera.

Yours, very respectfully, THOMAS MINER.

New London, July 23d, 1832.

DEAR SIR,—Dr. Mercer handed me your letter, and I shall be gratified if my remarks in answer to it are any way satisfactory. Being delegated by our Board of Health to visit New York, I arrived there on the 7th instant, and remained in the city, studying the disease, cholera, three days. The morning I left New York, Dr. Manwaring, of this place, joined me in the delegation, and our report on returning was this:—That the disease, in all its symptoms, resembled that which prevailed here last spring (an account of which is to be published on Wednesday, in the Gazette newspaper of this place); and that, in regard to treatment, we did not think it could be altered for the better, by adopting any we witnessed in New York. We could not discover any general principle to guide *their* practice. For instance: at the hospital * * * *, the physician gave half a grain of camphor, in an ounce of cold water, every twenty-five minutes, and as much and as often in enema. On asking the reason, he stated—The cholera *may* be owing to animalcula, and camphor was an antidote. To another, ice was given, and with the remark, that there seemed to be a raging, internal fever. On requesting the doctor to put his hand to the patient's mouth, and feel if the breath was hot, it was found cold as the north wind which blew freely over the patients. To another, *one* bottle of hot water was applied to the feet, while his limbs were exposed freely; and this was called the *heating plan.* These patients were all cold as a corpse, and without the least pulse at the wrist. If I mistake not, the name Cholera carries the idea of mystery, and is by many combated blindly; while the simple, clear, and loud indications are disregarded. As a general remark, we stated, on returning, that, excepting with our patients the brain was oftenest affected, while at New York the bowels were—in all other respects, they resembled each other closely, and, we believed, required the same treatment. They looked alike, before and also after death.

One patient from New York fell under my care [at New London]. She left there the 14th, was ill with what is called the premonitory symptoms the 15th, arrived here the 16th with diarrhœa, and the next night began to puke. On the morning of the 18th, I found her purging rice water freely, and puking a light turbid fluid. She had violent and painful cramps in the calves of her legs, some pain in the head, and more at the epigastrium; pulse ninety, and very weak; skin cool, paucity of urine, and a desire for cold water. Gave her hot brandy toddy once in four hours, a pill of opium and calomel once in two hours (two grains of opium and one of calomel), put hot bricks to her feet, and three blankets over her. In twenty-four hours, the colliquative (as I call them) discharges from the stomach and bowels were arrested completely, and, in thirty-six, she had no complaint but debility. The medicine was diminished gradually, during this time, *pro re nata*, and she rapidly recovered. After forty-eight hours from the time of arresting the evacuations, she had a bilious discharge from the bowels, without any other medicine except what is mentioned, and passed water in full quantity. I hope the plan may be tried in other places, and should be very much gratified to know the result.—I am, sir, respectfully, your servant and friend, J. Morgan.

P. S.—At New York, I saw about fifty patients, all in the hospitals, and more private. Of them, forty, I believe, died; and I further think, had we treated our cases as those I saw in New York, many more would have been lost. *Our* disease seems to have been something between *your* sinking typhus and cholera (Asiatic). The only hope in very bad cases is early, prompt, and decisive treatment; otherwise the patient dies.

Remarks.—It is highly gratifying, at last, to find a case of cholera treated according to the general principles of sinking typhus, by a physician familiar with the latter disease. Except the moderate quantity of calomel that was added, the practice was precisely what a case of the same severity of sinking typhus would have required, and the symptoms appear to have been controlled with less difficulty than in ordinary typhus syncopalis. I have no doubt, where the external circumstances are equally favorable, cholera is much the more manageable disease of the two. It appears to have, in general, but one paroxysm of *subsidentia*, or death-like sinking of the powers of life. If this is speedily overcome, by bold, energetic, and persevering efforts, upon the same principles as have been successfully practised in New England the last thirty years, the battle is soon fought, and the victory is complete. But, though we occasionally succeed in breaking up and producing a perfect resolution of sinking typhus, within a few hours, this is not generally the case. Commonly, we only mitigate the symptoms for the present, and are obliged to continue the course, though somewhat lessened in activity, for several days, in which we have to treat an irregular typhus, that is liable to diurnal paroxysms of gastric sinking. Typhus syncopalis appears to bear about the same analogy to malignant cholera, as intermittent does to remittent, sporadic catarrh to epidemic catarrh, or, perhaps, more nearly still, the malignant remittent of Batavia to the yellow fever of the West Indies. A physician who is familiar with either of these diseases, can certainly treat its correspondent complaint with sufficient skill and dexterity. I have no hesitation in giving it as my decided opinion, that, if it falls to the lot of the New London physicians to meet with epidemic cholera, their practice will be found to be, by far, more successful than has hitherto been the fact in any city, either on the eastern or western continent. T. M.

DR. WOOD'S REMARKS ON THE CHOLERA.

To the Editor of the Boston Medical and Surgical Journal.

Sir,—My design in the following remarks is to give a summary of the principal exciting causes, the most essential symptoms, and what I conceive to be the rational treatment, of spasmodic cholera. In describing the disease, I shall dwell more especially upon the first and second stages; deeming the third, or incurable collapse, that point in this disease, as in all others, in which the physician ceases to struggle with death for the mastery.

The principal predisposing causes of cholera are intemperance and poverty. Besides these, we may rank under the same head, fear, grief, anxiety, fatigue, excessive indulgences of any kind, and *all* other causes which have a tendency in any way to weaken the physical powers. After the excitement produced by the abuse of spirituous liquors has subsided, the predisposition in an individual to an attack of the cholera is greater than from any other known cause. But I fear this fact has been dwelt on too much, to the exclusion of one of nearly equal importance. I have reference to that enfeebled state of the constitution which follows, as a consequence, from an impoverished diet. There is a class of temperate poor, whose circumstances in life deprive them of the means of obtaining wholesome food and proper clothing, living in small, dark, damp, and badly-ventilated houses; which does and will suffer more or less from the ravages of this pestilential scourge. In New York, I saw many laboring under these circumstances, and should think it strange if we had not among us some in a similar situation.

The bad effects arising from the use of improper food were remarkably exemplified in the Bellevue Almshouse, New York. This institution is elevated, and pleasantly located on the East River, containing over 2,000 paupers, mostly intemperate and broken down by disease. Their diet, prior to the appearance of the disease, and for some time after, consisted chiefly of Indian meal, with the addition of coarse salt meat, or salt fish, three times a week. The ravages of the disease, very soon after its appearance, were so rapid and frightful, that the city authorities gave freedom to many, and thought it might be necessary to remove the rest to some more healthy situation. Before this was put into operation, the Special Medical Council visited Bellevue, and, after due consideration of all the circumstances that had any bearing on the subject, it was agreed not to remove them, but to recommend a complete change of diet. The beneficial results of this measure were soon perceived. After the third or fourth day, the disease greatly abated, and a decided diminution in the number of new cases has continued daily down to the present time. As a matter of course, many of the inmates who died of cholera had grown temperate from necessity, and others had the credit of being so from choice. Now, if this be true, what is the inference? In addition to this statement, it may be observed, that, at the city hospitals and elsewhere, many children and young persons perished, who, it would not be unreasonable to suppose, had rarely, if ever, partaken of ardent spirits.

During my stay at New York (from the 11th to the 17th of July), I had an opportunity of seeing more than 500 cases of cholera; and, from a careful examination of the patients themselves, and frequent conversation with physicians, I feel little hesitation in expressing my opinion as to the characteristic symptoms of the disease, and the order in which they almost invariably appear. They are—1st, diarrhœa, or purging, which continues from three hours to as many days; 2d, in addition to purging, which *now* becomes excessive, vomiting; and 3d, from fifteen minutes to an hour after vomiting and purging have commenced, spasms or cramps (generally of the gastrocnemii) ensue. This last symptom does not continue so long as the puking and purging, always disappearing early in the stage of collapse; and so, in the majority of cases, do the first and second.

In what is called the first stage, diarrhœa is the most conspicuous symptom; but there are others, as dizziness, languor, occasional nausea, ringing in the ears, and twitchings of the muscles in various parts of the body. These symptoms, however, are generally overlooked by the patient.

In the first, or diarrhœal stage, I do not mean to imply that because an individual has this derangement of the bowels, he must necessarily have cholera. This is not true in point of fact. When cholera is prevalent, there is a general predisposition to bowel complaints; and this irritable state of the intestinal canal, if long continued, prepares the system for an attack of cholera. We shall therefore continue to consider diarrhœa a precursor of cholera, and, as it is under the perfect control of medicine, recommend to all those who suffer from it to apply seasonably for medical advice.

In the second stage, besides puking, purging, and cramps, there are also other symptoms, viz.:—restlessness; a burning sensation at the pit of the stomach; coldness of the extremities, without any very marked change in the temperature of the body; an accelerated and contracted pulse; an anxious and shrunken face, with sharpened features; eyes dull and sunken, surrounded by a dark brown circle, sometimes of a faint, dirty, bluish tint; tongue moist, and slightly coated; voice hoarse and broken. The discharges in this stage, both up and down, assume the appearance of rice water. This is one of the peculiar characters which distinguish this disease from all others. If the physician is called early in this stage, he may consider himself very fortunate; for if there be a point in the disease truly assailable, it is this; and in this stage *only* can the physician be said to meet death on an equal footing.

With regard to the third stage, or the irrecoverable collapse, I must refer you to authors, who have dwelt more upon it than upon those stages which I conceive to be of vastly more importance to the well-being of suffering humanity; for I do most solemnly assure you that I have never seen or heard, during my stay in New York, of a single case of true collapse being restored—those reported as such being cases of the most aggravated form of the second stage.

For the treatment of the diarrhœal stage, I should recommend abstinence from solids, remaining quiet in the house, and swathing the bowels with flannel; after which, prescribe a simple cathartic, as rhubarb and calcined magnesia, of each ten grains, or castor oil, from half an ounce to an ounce, in some aromatic drink, or calomel two grains, and rhubarb fifteen. If one of these prescriptions does not operate in the course of six hours, repeat it. During the prevalence of cholera, small doses of medicines are particularly advised, because serious consequences sometimes attend the administration of common doses. After the bowels are fully evacuated, the patient may be allowed a bowl of thin arrowroot, or ground rice well boiled, flavored with cinnamon, adding, if necessary, from two to four tablespoonsfull of old port wine. If these remedies fail, confine the patient to bed, apply hot applications to the abdomen and feet, and give calomel and opium, in small doses, until healthy secretions are restored.

The most successful treatment of the second stage I saw employed in New York, was as follows, viz. :—place the patient between warm blankets ; stop the use of *all* fluids, as they increase the irritability of the stomach ; and, if the pulse is not much depressed, bleed moderately, according to the patient's strength, avoiding an approach to faintness. As there is considerable heat, and often tenderness, over the epigastric region, would not leeching or cupping, followed by a large blister, be advantageous, and, when the pulse is feeble, supply the place of the lancet ? After bleeding, if the vomiting is excessive, let the patient swallow a small piece of ice, to be repeated if necessary ; then give a bolus of ten or twenty grains of calomel and one or two of opium, and every half hour or hour, whether the bolus is retained or not, give pills of calomel and opium, containing from two to five grains of the former, and from a quarter to a half of the latter. Meanwhile, apply hot sinapisms to the abdomen and feet, and hot sand bags, or bottles of hot water, to the body and extremities. At the Greenwich Street Hospital, the physicians employ frictions of strong mercurial ointment, combined with camphor and cayenne pepper, and say, if salivation is produced, the patient recovers. Should the purging continue obstinate, throw up an injection of one or two drachms of laudanum, in a gill of warm water. The cramps are more troublesome *now* than at any other time. To remove them, rub the affected limbs briskly with flannel or a soft brush, dipped in a saturated solution of camphor in alcohol, or the essential oil of peppermint, or give a smart shock of electricity, or apply a lump of ice suddenly to the sole of the foot. Either of the above remedies was found effectual in relieving them.

External heat and the pills are to be continued until reaction takes place, and the discharges begin to assume a bilious aspect ; after this, the heating applications may be gradually removed, and the pills discontinued or taken at longer intervals. Sometimes reaction is attended with considerable fever, a quick pulse—the tongue being dry and brown, with a red edge—stupor, and dilated pupils. These symptoms, among others not mentioned, constitute what is called the consecutive stage. In all the cases of this stage which I saw, there was decided congestion of the brain ; to relieve which, cupping, blistering, and cold applications to the head, were the remedies employed. But if reaction do not take place, the symptoms of this stage increase in severity, and the third, or stage of collapse, commences. This is known by increased coldness of the trunk and extremities ; blueness of the face, hands, and feet ; a feeble pulse ; and a haggard, shrunken countenance. At this period, the most powerful stimuli, in combination with the above-mentioned treatment, such as oil of peppermint, cajeput oil, ammonia, brandy, &c., may be exhibited. But I am persuaded, so far as my observations have extended, that little confidence is to be placed on these or any other remedial agents.

I saw nothing in the post mortem appearances differing from what has already been described by authors.—Respectfully yours,

James Wood, M.D.

Boston, July 26th, 1832.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, AUGUST 1, 1832.

TREATMENT OF CHOLERA ON ITS FIRST ATTACK.

In the New York Journal of Commerce, a writer under the signature of "Cullen," after recommending the stimulating treatment, so generally advised on the first access of the Cholera, goes on to say—

I have recently been strongly confirmed in my views, from the statement of a very intelligent ship master, who, (in two voyages to India, one of them to Calcutta and the other to Manilla, in both of which ports he found cholera prevailing to an alarming extent,) has had ample experience in the treatment of this formidable disease. While at Manilla, his whole crew, with himself, were attacked with cholera ; and yet, though some of the cases, and his own in particular, were very severe, *not one of them proved fatal.* Besides, he experienced a slight attack himself at Calcutta. The treatment was as follows : As soon as the symptoms were so urgent as to make it evident that the case was actually cholera, (and generally there was no difficulty in ascertaining this point in a very few minutes, or even at the moment in which a man declared himself unfit for duty,) the captain, without being very scrupulous as to the measure or quantity, put about a hundred drops of laudanum, and nearly as much of the spirit or essence of peppermint, into a wineglass, and filled it with brandy. This he gave the patient immediately. With a few, who were inclined to be intemperate, the dose of brandy was a gill or even more. At the same time, the patient was wrapped in blankets, and heated applications were made to the stomach, abdomen, limbs, and feet. This treatment, applied instantly, controlled the vomiting, purging, pain, cramps, spasms, &c. and removed the coldness and numbness of the extremities, in general, so speedily, that there was seldom occasion to renew the dose, and the disease was usually nipped in the bud. In his own case, which the captain considered as of the severest kind, he remarked, that if he had waited an hour or two for medical assistance, and been entirely ignorant of the proper treatment, his condition would unquestionably have become hopeless in that time.

I have little to add to my former remarks, except to enforce, with renewed earnestness, the *immediate attention to the very first symptoms of Cholera.* It is believed, that nine tenths of the mortality of this disease in Europe, are owing to the delay in procuring medical aid, or to the timidity of the physicians in giving suitable doses of medicine : or to another circumstance, arising from mistaken medical theory. After the symptoms are controlled, most of the foreign practitioners seem to think that there is danger from the very remedies which they have employed ;

and this they attempt to remove by bleeding and cathartics. These processes are very liable to produce a relapse, and in general are worse than useless. Further—there is frequently an indecision in *keeping the ground* that has been gained. The remedies should be generally continued, in diminished, but *regular* doses, every 2, 3, or 4 hours, and in certain cases much more frequently, as long as there is any apprehension of the return of the symptoms.

The writer who gives us this statement, is one whose experience and acknowledged ability in his profession entitle his opinions to great respect; and the Captain referred to is Captain Nash, who sailed from this city. A similar account we received from a gentleman of high standing, who has spent much time in India, and is recently returned from Calcutta.

CHOLERA AT NEW YORK.

On the 21st ult., there were 291 cases and 94 deaths ; on the 22d, 230 cases and 85 deaths ; on the 23d, 205 cases and 63 deaths ; on the 24th, 239 cases and 79 deaths ; on the 25th, 144 cases and 53 deaths ; on the 26th, 123 cases and 44 deaths ; on the 27th, 119 cases and 41 deaths ; on the 28th, 142 cases and 63 deaths. At Bellevue Almshouse, where the disease appears to have nearly accomplished its work, there were but 20 cases and 10 deaths on the 21st ; 9 cases and 5 deaths on the 22d ; 26 cases and 20 deaths on the 23d ; 22 cases and 7 deaths on the 24th ; 10 cases and 5 deaths on the 25th ; 14 cases and 7 deaths on the 26th ; 3 cases and 5 deaths on the 27th ; 1 case and 4 deaths on the 28th. On the 24th, at Yorkville and Harlem, near the city, there were 35 cases and 10 deaths ; on the 25th, 3 cases and 3 deaths ; on the 26th, 4 cases and 4 deaths ; on the 28th, 2 cases and 1 death. At the State Prison at Sing Sing, the disease has committed great ravages. At Brooklyn, it prevails somewhat extensively ; the number of new cases on the 25th being 17, deaths 4—on the 27th 13, deaths 7.

DAY OF HUMILIATION AND PRAYER.

We are truly happy to find that His Excellency Governor Lincoln has appointed a day of fasting, humiliation, and prayer, to be observed throughout this Commonwealth, in consequence of the threatened visitation of the pestilence that walketh in darkness. Every precaution which wisdom and experience can suggest, ought to be taken to prevent its appearance among us. But since all will be in vain, without the sparing mercy of that Being who controls all events, it becomes us to offer our petitions, with deep sincerity, to our common Father, who holds the rod, so richly merited, in his own hand. We are not threatened, it is true, by the voice of a prophet ; but that which saved Nineveh from destruction, may prove no less availing at the present day.

The day appointed by the Governor is the 9th of the present month. And if there be any one that doubts the propriety of this measure, we beg him to read a discourse on the efficacy of prayer, preached at Edinburgh, on a similar occasion, by the celebrated Dr. Chalmers. This powerful and eloquent discourse has been republished in this city, and, at the present day, commends itself with peculiar force to the notice of us all.

PRATT'S ARTIFICIAL NIPPLE.

As a preventive and a cure for irritable, inflamed, excoriated, and fissured nipples, we have never met with anything that promises so much as the invention of Dr. Pratt. It is decidedly an improvement over everything of the kind heretofore in use, and it becomes every mother who is at all subject to the above infirmities, to rejoice that so effectual and speedy a remedy is at hand.

The soft or udder part of this apparatus is tanned in such a way as to render it durable, and yet soft and tasteless; and it is for this mode of tanning, chiefly, that the inventer has procured his patent. It is not wholly for this, however. The form of the metallic part, and the mode in which the udder is confined to it, are greatly superior to those we have been in the habit of using, and the diversity is such as entirely to change the principle on which the instrument acts. It is used with great ease by the nurse or mother, and printed directions, for preserving and applying it, accompany each instrument. We have seen it used by a lady, in whom this part was extremely flat, and so tender as to render the very thought of nursing her child shocking to her. By means of this apparatus, the babe took hold, and emptied the breast without producing the slightest sensation of uneasiness. Indeed, we esteem the thing invaluable.*

Observations on Tobacco, by John Vetch, M.D.—Under other circumstances it had been my intention to give to the public a series of detailed cases, to establish the beneficial effects of tobacco as a local application, and one capable of alleviating, in a great degree, and of sometimes altogether arresting, various forms of specific inflammation, more particularly gout, and rheumatic inflammation attacking the synovial membrane. Besides the power which this vegetable possesses in allaying the pain and abating the inflammation of gout, it assists the parts most materially in recovering their tone and strength.

The sensible effects of tobacco upon the skin and cuticle are readily perceived by immersing, for a short time, the fingers in an infusion, or in a watery solution of the extract.

The infusion forms a valuable application in all cases of erysipelatous inflammation; and the only precaution to be attended to, is not to apply it to any part contiguous to the stomach, unless the production of nausea be at the same time desirable.

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* Pratt's Artificial Nipple is sold in this city at $1,25, by the following apothecaries: Charles White, corner of Washington and Winter Streets; L. H. Bradford, corner of Washington and Pleasant Streets; and Beza Lincoln, corner of Salem and Prince Streets.

I was led to appreciate the valuable sedative and astringent power of tobacco, in the first instance, by the benefit I derived from it in cases of the last-mentioned class, having many years ago instituted an extensive trial of all the known narcotics, with the expectation of deriving additional aid in the treatment of purulent ophthalmia.

The good and the powerful effects which I obtained from the tobacco, fully compensated for the inefficiency of all the other local applications I then tried. Its effects were notorious to all who saw it employed, and I now, as I ought to have done twenty years sooner, recommend its use to general notice, in cases of acute migratory inflammation, and especially when it attacks the joints, testicle, or sclerotic coat of the eye.

The infusion as directed by the London Pharmacopœia is sufficiently strong, and in many cases it is well to rub the part with eau de Cologne after the use of the tobacco.—*Med.-Chir. Transactions.*

New Epidemic in France.—A disease of a formidable nature, and consisting of profuse sweating, with miliary eruption and extreme debility, has manifested itself in some parts of France, and, notwithstanding the presence of cholera, has excited so much attention, that a medical commission has been despatched from Paris, to the infected districts, to examine into its nature.

The Cholera.—The disease appears to have nearly disappeared in Montreal and Quebec. Total number of cases in the latter city, 894; deaths, 562. In Albany, on the 25th ult., new cases, 29 : 18 severe ; deaths, 7. On the 27th, new cases, 32 : 20 severe ; deaths, 7. At Philadelphia, one case of malignant cholera was reported on the 24th. One or more cases have also occurred in Bristol and Newport, R. I. ; New Brunswick and Elizabethtown, N. J. ; and at Hudson, Troy, Buffalo, and Greenbush, N. Y.

The letter from Dr. C., and several other valuable communications, are unavoidably deferred till our next.

Whole number of deaths in Boston for the week ending July 27, 23. Males, 9—Females, 14. Stillborn, 2.

Of typhus fever, 2—throat distemper, 2—teething, 1—consumption, 4—intemperance, 1—dropsy on the brain, 1—childbed, 2—infantile, 1—measles, 2—scarlet fever, 1—inflammation in the bowels, 1—debility, 1—suicide, 1—unknown, 3.

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THE BOSTON MEDICAL AND SURGICAL JOURNAL

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THE

BOSTON MEDICAL AND SURGICAL

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BARON CUVIER'S LAST SICKNESS.

THE last illness and death of Cuvier were attended with some very remarkable circumstances. On Monday, the 7th instant, he complained to his friend, M. Duméril, for the first time, of an uneasiness at his stomach, with looseness of the bowels, for which he was advised to keep his room next day, and to take some remedies suited to the circumstances. This he declined doing, because he had to preside at a council of state, a duty which he accordingly discharged. On his return, he met with the physician who usually attended him, M. Allard, and whom he took the opportunity of consulting. Cuvier had experienced at breakfast, that morning, a considerable difficulty in swallowing; in consequence of which, M. Allard thought it necessary to advise the application of leeches to the anus. On returning home, however, his patient betook himself to his scientific labors, in which he remained engaged from two o'clock in the afternoon till half past five, when he was summoned to dinner. It was only then that he informed Madame Cuvier of M. Allard's having prescribed for him, intimating his intention of postponing the application of the leeches till his usual bed time—being at that moment, he said, more inclined for his repast. He sat down accordingly to dinner, but scarcely had been helped to some soup, ere he found that he was almost entirely unable to swallow. M. Allard was now sent for, as were MM. Duméril and Orfila. Leeches were applied in the evening, and in the course of the night he was bled from the arm; but neither of these means was followed by any relief. Next day, MM. Dupuytren, Biett, and Koreff, were added to the attendants, and joined them in consultation. On Wednesday morning, it was resolved to administer an emetic, and four grains of tartarised antimony were dissolved in some spoonsful of water; but only a small portion of this could be got down. At this time, M. Cuvier had no appearance of illness; he had no uneasiness, and no fever, but merely complained of extreme difficulty of swallowing, and of a gradually increasing inability to move the upper extremities, without there being the slightest perceptible change in these parts. The emetic did not act upwards, but produced several evacuations from the bowels. Twenty-four grains of ipecac. were afterwards injected into the stomach by M. Dupuytren, by which, however, no effect was produced; and some hours afterwards, four successive doses, of twelve grains each, were similarly introduced, but without any emetic effect resulting. The difficulty of moving the hands and arms went on gradually augmenting. Leeches to the upper part of the spinal column were now recommended, and next day (Thursday) cupping-glasses were applied along the back, but scarcely more than four ounces of blood were obtained. The upper extremities were now perceived to be slightly tumefied. Various plans were suggested in consultation, particularly the actual cautery, and blistering to the spine—the latter of which only was adopted, and even that, it would appear, but imperfectly. By Sunday the paralysis had extended, and in fact had become general, implicating the respiratory muscles; the lower extremities were absolutely motionless, and the stomach and bowels seemed to have ceased to perform their functions. M. Cuvier, however, retained his mental faculties unimpaired, and was fully aware of the danger of his situation—constantly expressing his regret at leaving so many works unfinished. "This hand," said he repeatedly, "this hand, which has performed so many dissections, and committed so many of the results to paper, is henceforth condemned to inactivity." Afterwards, as the symptoms continued to increase, he spoke, not merely of the loss of his limb, but of his death, and expressed, with deep regret, the necessity of leaving his Comparative Anatomy incomplete: in fact, he was engaged in remodeling this great work at the time he was struck with the fatal paralysis. On Sunday, at five, P. M., he spoke with difficulty, and only to express the general uneasiness which he felt. M. Duméril, when he quitted him, remarked that he would see him again early next morning; but Cuvier shook his head in such a manner as to express his belief that they should meet no more. In a few minutes after this interview, he began to sink, and expired between ten and eleven at night.

The general impression among the medical attendants was, that M. Cuvier's complaint depended upon some lesion of the spinal marrow, attended with pressure; and this expectation was the more probable, as it appears that their patient, not long before his death, had met with a fall, in which he had strained himself in the effort to recover his balance. The body was examined on the 15th, when the following appearances presented themselves. The general aspect externally remained unchanged, except that putrefaction had already made some progress; the cranium was very large; the vertex flattened, and almost quadrilateral; the thickness of the parietes, particularly at the frontal sinuses, was very great; the right side projected more than the left, and the same was observed of the parietals; the occiput was also fully developed; the inner table of the frontal bone exhibited three nipple-like projections; the convolutions of the brain were very numerous and voluminous. The lateral ventricles were very much dilated, and contained a small quantity of reddish serum; the membrane lining them was slightly rugose; there were some calcareous depositions in the pineal gland; the origins of the nerves were sound, and the whole of the encephalon and spinal cord were without any alteration in texture, color, or form. The œsophagus presented no appearance of disease, and all the viscera were sound. The processus dentatus was unusually large, and there existed a sort of bony projection at each point of junction between the vertebræ, along the whole anterior surface of the column. These, however, must have been long present, and cannot be regarded as connected with his death: indeed, they were supposed by the reporters, and with some probability, to be connected with the peculiar habits and gait of M. Cuvier. The entire absence of any post mortem appearance calculated to explain the phenomena attending M. Cuvier's death, has led some—particularly Magendie—to hazard the opinion that his illness was, in fact, but a modification of cholera, indicated in the first instance by diarrhœa, and subsequently by nervous depression, the intellect remaining unimpaired.

Sœmmering, as the extreme weights of the healthy human brain, gives two pounds five ounces and a half, and three pounds three ounces and three quarters—the great majority being intermediate between these two; and M. Bérard, in some recent examinations, has arrived at nearly the same results. But the brain of M. Cuvier weighed three pounds ten ounces four drachms and a half, being much above the extreme weight mentioned by Sœmmering. Besides, the cerebellum and tuber annulare were compared with those of a male adult, and found to exceed them in weight only by a drachm and a half; so that, in M. Cuvier, the excess was almost wholly confined to the extraordinary development of the anterior lobes; that is, to the organ of the intellectual faculties. Again: according to M. Desmoulins, one of the characters of the brain, with which superiority of intellect seems to be associated, is great extent of surface, resulting from the number and depth of the convolutions; so that a great expansion of this kind might be comprehended within a cranium of moderate dimensions. Viewed in this light, the brain of M. Cuvier was even more remarkable than with respect to its size—none of the distinguished anatomists, who were present at the examination, having ever witnessed convolutions so numerous, or anfractuosities between them so profound. It was at the upper and anterior part of the brain that this conformation was most strikingly developed.—*Medical Gazette.*

THE NEW YORK PRIZE ESSAY.

Further Remarks on the New York Prize Essay, in a Letter to the Editor of the Boston Medical and Surgical Journal.

Sir,—I beg leave to tender you my thanks for the general typographical accuracy with which my communications have appeared in your interesting periodical, and could wish them more worthy of the public regard. There is, however, one small error in my remarks, which appeared in your Journal of the 11th instant (p. 350), which I deemed of sufficient importance to notice. The error is of one letter only—a *v* for an *r*. *Pleno rivo* is printed *pleno vivo*. This term occurs in one of my extracts from the Prize Essay of the *New York* State *Medical Society*, in which I aimed at perfect correctness.

Pleno rivo—literally a *full river*—is probably meant, by the writer of the Essay, for a *full stream*. The author, however, and his elevated patrons, are entitled to the privilege of having their terms literally construed, if they choose. *A full river of blood*, drawn from a patient in typhus fever, will perhaps best suit their ideas of its treatment, which is, at any rate, that of drawing blood, either by venesection or by arteriotomy, till faintness is produced, which is to be aided and kept up by large enemata and drastic cathartics. For the latter purpose, calomel and jalap are repeatedly recommended.

It will not, I hope, be deemed improper for me, in this place, to make some further remarks upon this very extraordinary Essay.

The views and doctrines of prize publications are given to the public with far more than ordinary tokens of notoriety and consideration. They are ushered into the world as containing not only the very deliberate sentiments of the writer himself, but also of the Committee, College, or Society, which approves and patronises them. They are the results of successful competition, and the productions upon which rewards, both honorary and pecuniary, are bestowed. When published, they become public property, and, if correct, ought to be received and regarded as grand luminaries, placed aloft to guide the benighted, to instruct the inquiring, and to confirm the doubtful. And never—never, in any case, ought they to pass unheeded, or to roll down the stream of time unnoticed; especially when they are upon topics so immensely—I might have said infinitely—important, as those of the lives and health of the community. Indeed, they ought to stand as enduring monuments and mementos of the periods of the world in which they issue, and as marks of the sentiments, opinions, and doctrines, of particular eras, particular places, schools, and celebrated men; and all this, because we are to suppose their principles fixed on by the wise, discerning, and philosophic, after deliberation the most mature, and scrutiny the most severe. Shall this pamphlet, then, pass without animadversion, which makes HIPPOCRATES, and the most celebrated names of antiquity—as well as those of Huxham, and Cullen, and Pringle, and Rush, and Good, and Warren, and North, and Todd, and Miner, and Tully—a parcel of dunces? which asserts the innocent nature of the most nauseous animal putrefaction, and that cleanliness and ventilation are of no utility in preventing fevers? that the best mode of treating typhus, in all its forms, instead of being that of moderately evacuating or mildly strengthening the feeble patient, is to bleed *pleno rivo*, and to purge with drastics *ad infinitum*?

How very discrepant are the notions of the *prize writer* and his patrons, from the philosophers of the profession above enumerated, as well as from those, although not of the medical vocation, who yet had minds of sufficient magnitude to throw a gleam of light upon every subject on which they glanced! Lord Bacon, for instance, ranks the smell of a prison, where the inmates have been long kept in a state of filth and impurity, as next to the *virus* of the plague. And Erasmus ascribes the spreading and mortality of the plague itself, to the want of cleanliness, and to animal filth "within doors." It would indeed appear, that, in the time of Erasmus, the inhabitants of London, and the English in general, were the most slovenly people in Europe; whereas they are now the most cleanly. And to this last national virtue, their immunity from the plague, and the inconsiderable progress of the cholera, may be attributed.

I had almost thrown down my pen in disgust, when I recollected that I was advocating what was so universally assented to by the wise, the good, the scientific, the philosophic, the moral and religious, of all ages and of all nations. But I recollected again, that I was actually controverting a doctrine sanctioned by the *New York* STATE *Medical Society!* and that so lately as 1828!

What an immense deal of pains have Philadelphia, New York, Boston, and our other cities, been taking, to clear away exuviæ from their streets, for nothing at all! Why had they not referred to this prize pamphlet of the magnanimous STATE *Society*, which tells us, after quoting some instances of escape from being poisoned to death by stenches and putridity, that "these facts are considered sufficient to prove that fever of no kind or description ever arises from animal putrefaction" [p. 50]; and that ventilation does not contribute to health, is proved by its opposite not producing typhus fever, nor any other form of disease? To establish these points, the case of the Russian boor, who lives with his family in a hut under ground, which is made tight by caulking with moss, and which for six months is not ventilated, is adduced as triumphant proof.* But the writer shall here again speak for himself. He says—"From these facts, we learn that the effluvia, arising from the crowding of healthy persons into close, unventilated situations, in cold countries at least, is not productive of fever; and, upon examination, we shall find that the same cause is equally innocuous as regards the production of typhus fever in warmer regions of the globe" [p. 52].

Of sweating, which is considered, by all who know anything of spotted and typhus fevers, to be of the utmost importance, and by some as the *ancora sacra*—a remedy, indeed, which has given celebrity to the name which first introduced it, and a process which arrested the mortality of those fevers, which before were sweeping to the grave almost every individual who was subjected to an attack; of sweating, then, the prize writer speaks in the following terms:—"This destructive and irrational practice is fortunately now almost exploded at the present time; and physicians now, with the exception of using a few antimonials, generally leave it to nature, who effects it best in her own way" [p. 8].

As might have been expected, bleeding is already adopted, by those who bleed in typhoid diseases, even in the cholera itself! Broussais bled Casimer Perrier with leeches, and Mr. Grimm, of New York, was subjected to phlebotomy: both are dead. Dr. Nelson also tells us of its having been adopted in Montreal, but with such ill success as to confound its most strenuous advocates. From late accounts from Canada, it appears that typhus fever there follows the cholera, as a modification of that epidemic, but as a less dangerous disease. Should, however, the lancet be introduced into its treatment, it may be easily made equally mortal. The inconsiderable mortality which attended the spotted and typhus fever at New London, the present year, may be attributed to the unanimity of the physicians there, headed by DR. NORTH, in adopting an appropriate mode of treatment, viz.: a supporting, exciting, stimulating, and sudorific plan, and in judiciously abstaining from bloodletting and all other debilitating remedies.

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* It ought to be here recollected, that filth will not poison bodies made up of that material.

As I have stated that the prize pamphlet will not admit animal putrefaction, nor animal effluvia, nor want of ventilation, to produce typhus fever, it may be inquired, by those who have not seen the Essay, to what cause the writer does impute it? I answer: to the same vegetable miasm which produces intermittent and remittent fevers.

Now, that he is here again egregiously incorrect, is fully proved by the late PROFESSOR SMITH, of New Haven. DR. SMITH, in his "Practical Essay on Typhus Fever," says that "It has been suggested that typhus occasionally arises from marsh miasmata—the same which, under certain circumstances, produces intermitting and remitting fevers. A fact, which I shall here advance, is strongly opposed to this hypothesis. On the Connecticut River, from Northampton, in Massachusetts, to its source, a distance of more than two hundred miles from north to south, and on all its tributary streams on both sides, for an hundred miles in width, there has been no instance of any person's having contracted the intermitting fever, from the first settlement of the country to the present time; and yet the typhus fever has prevailed more or less in every township within that tract of country" [p. 15]. Dr. Smith's Essay was published in 1824.

I shall conclude with a few remarks on bloodletting. This operation in congestive diseases is at best a hazardous experiment.

In cholera, spotted fever, and pneumonia typhoides, the blood leaves the smaller vessels, and, from debility, quits the capillary system—weakness becoming first apparent and alarming in the weak and small vessels. The veins are flat, and the pulse frequent and feeble; whilst the large vessels near the heart, with the heart itself, its auricles and ventricles, as well as the pulmonary system, are engorged with a superabundance of the vital fluid. Now, could bloodletting reach this engorgement, it would, to be sure, answer *one* remedial purpose. But will it do it? I fear not. By letting blood in such cases, you stand the very great chance of doing a certain injury for an uncertain good. You with absolute certainty draw blood from a vein where more is needed, with the great hazard of not relieving the parts which are suffering from congestion. The mechanical or hydraulic principle upon which your operation of phlebotomy is founded, cannot, with any degree of certainty, be relied on. You bleed, *not* because there is too much blood in the vein or artery which you open, but because there is *too little there*, but *too much* somewhere else. But why is there too much blood in the heart, lungs, and large vessels? There are at least three reasons or causes for this:—1st, the brain acts feebly on the heart; 2d, the heart acts feebly on the blood; 3d, the minute vessels are affected with debility and consequent spasm; and a 4th reason may be, that the pores are obstructed. The pains in cholera, spotted fever, and pneumonia typhoides, are all spasmodic. They are relieved by opiates, by ammonia, by ether, by oil of amber, by camphor, by warmth, and other antispasmodic remedies; they are increased by cold, by depletion, and by whatever debilitates the system. To relieve congestion, therefore, we remove the spasm, we relax the pores, we excite the stomach, the brain, the heart, the arteries, the nerves, and the lungs, by suitable diffusible stimulants. We thus enable the heart to push forward its load of *black blood* into the small empty arteries and collapsed veins; we oxygenate it in the lungs, by the admission of pure air, and by well ventilated, but not too cool, apartments. We thus increase the energy of the whole debilitated system, and quiet the distress, and warm the surface, and raise the pulse, and brighten the eye, and procure sleep, and bring comfort and hope to the afflicted patient and his weeping friends. Our methods of treatment, in fact, reverendly to use a sacred metaphor, are to draw with the cords of love, rather than to drive with bolts of thunder.

Still, we fully agree, that in cases of croup, in genuine pneumonia, and other inflammatory diseases, which are indicated by a full, tense pulse, by prominent veins, and by a dense fibre, we bring the same relief, and the same cheering results, to the patient and his friends, by the free use of leeches or lancets, and the liberal abstraction of blood.

There is, however, a small, depressed pulse, with a tense fibre, which admits of some bloodletting; and the same remedy is appropriate, sometimes, to a greater extent, in some cases of mania, wherein the pulse is natural, but in which there is a morbid strength in the muscles, an insensibility to cold, and no diminution of appetite. Still, the general system is in a very different state, in such instances, from that of cholera and other typhoid diseases. In the latter, there is a soft, velvet-like feeling of all the muscular parts; a soft and easily-compressible pulse; a shrinking of the features, and a frequency of pulsations, which absolutely prohibit the lancet.—Yours, &c.

Lebanon, Ct. July 23d, 1832. JOSEPH COMSTOCK.

CHOLERA IN NEW YORK.

On the Symptoms of Cholera in New York; with some Remarks on the Management of the Disease. Read before the Boston Medical Society July 23, 1832, by JOHN WARE, M. D.; and communicated for the Boston Medical and Surgical Journal by the Publishing Committee.

THE object of this communication is to give some notice of the symptoms of Cholera, as they were presented to the writer during a short visit to the city of New York, since its prevalence there, and some suggestions with regard to the management of the disease.

A few days' opportunity only of observing so formidable a malady, may be thought hardly sufficient to justify an individual in offering anything concerning it to his medical brethren or to the public. But it is to be recollected, that in the case of a new disease, we are all obliged to approach it in a state of at least partial ignorance; he, therefore, who knows but little from actual experience, may be able to impart something. His labors are still more likely to be useful in preparing others for its attack, if it present a variety in its aspect, as it appears in different places; if for instance it differ in Canada and New York, from the description we have had given of it in Asia and in Europe.

This appeared to be the case. At least the impression made by the inspection of patients laboring under Cholera, was different from what the usual descriptions given of it had prepared me to expect. Not that there was any variation in the symptoms or course of the disease, which could for a moment throw any doubt on its identity; but there was a very considerable variation in the relative prominence of the phenomena.

So familiar have we become with accounts of Cholera, that, instead of describing the disease, as it presented itself in detail, it will be only necessary to refer to those symptoms concerning which some particular remark occurs. The most universal of the symptoms, were the deadly coldness of the whole surface of the body, and the soaked, sodden and shriveled appearance of the hands and feet. Generally, also, there was a bluish or livid tinge of the skin of these parts, particularly of the extremities of the fingers beneath the nails. The hand in some instances resembled that of a person who had been working in a black dye. The blue or dark color of the face and of the rest of the body was not very common; much less so, according to the information of those who had visited Montreal, than it had been there. Still, a few patients were seen so dark, as not to be readily distinguished, across the ward in which they laid, from mulattoes. The cold tongue, which has been described as so strikingly characteristic in some places, was noticed in but a small proportion of cases. It had generally a slight white fur. The pulse, though commonly very small and obscure, was not so frequently extinct at an early period of the stage of collapse as was expected; and in some cases it was found quite distinct and of good volume, at not a very long period before death.

The vomiting and purging were less violent and frequent than had been expected. It was rare to witness more than one or two patients suffering from either, during a visit to a hospital containing twenty or thirty. They seemed to take place chiefly in the earliest period of the case, and in some, never existed in any violent degree. One patient was seen at 11, A. M. whose bowels, according to his report, had been in a regular state the day before, and who had only had, in the course of the morning, three or four discharges in the privy. He had not vomited at all; yet he had scarcely any pulse—his skin and tongue were cold, and his hands and feet were affected by cramps. He had regarded himself as being well on rising in the morning.

Nearly all the subjects of the disease complained of cramps, or said that they had been afflicted by them when first seized. Still, very few were seen laboring under them so severely as to occasion any marked external demonstration of suffering. In nothing, indeed, did the cholera of New York differ more from the most common descriptions, than in the absence of any *indications* of great distress. It is true that a few seemed in much agony when vomiting, or undergoing spasm; others complained bitterly of thirst and oppression, and burning at the stomach: but in general there was little complaint, and little disposition to notice external objects at all. The aspect of the patients was almost that of indifference, and unconcern as to the event in themselves and in others. They seemed like persons totally absorbed in their own sensations, although in sensations which were not of a very acute or distressing character. They appeared often as if in a benumbed or stupefied state; yet were without difficulty roused, and were at once perfectly sensible. Neither was there the sulkiness or irritability which has been said to appertain to patients with cholera. They answered questions readily and pleasantly. Though surrounded by medical men, and undergoing frequent examinations, I saw no instance of the manifestation of ill humor. Often, as soon as a physician approached the bedside, the tongue would be protruded and the arm stretched out.

In some cases the peculiar hollowness of the countenance, and the shrinking of the body and limbs, were strongly marked; and in these, the aspect of the dying person was almost terrific. But these appearances were frequently wanting even in bad cases, and I am not aware that the countenance could have been always distinguished with certainty from that which is exhibited in many other severe and exhausting diseases. Neither did the voice vary essentially from that of patients with such diseases. The shrieks and cries of pain, which accompanied the vomiting and spasm, were perhaps a little more characteristic.

The respiration was not always accelerated; but generally at least was performed without much action of the diaphragm, and was consequently attended by considerable heaving of the chest, and some labor. The chest seemed also as if imperfectly distended. In the act of death, this mode of respiration was continued; it simply became less and less full, till it ceased altogether. Only one individual was noticed, in whom death took place with a kind of breathing like that so commonly witnessed; viz. that accompanied by the rattling of mucus in the throat.

The excretion of urine was almost universally wanting during life; and but little was found in the bodies of those who were examined, except, as was observed by a gentleman who had made many dissections, where the vomiting and purging had ceased for a long time before death.

From the dissections which were witnessed, and from the accounts of gentlemen* who had made a large number, it was inferred that the heart and large vessels did not generally contain any large quantity of blood. The heart was found sometimes empty, and sometimes all its cavities were moderately filled with blood. The arteries always contained black blood. On comparing blood found in the descending aorta with that contained in the corresponding part of the vena cava, that in the aorta resembled common venous blood, whilst that in the vein was still darker, thick and imperfectly coagulated, being nearly of the consistence and color of tar. In the cranium, there was an effusion of serum into the ventricles and at the base of the brain. The bloodvessels were quite full, but not unusually so. No morbid appearance was observed in the spinal nerve. The lungs were considerably congested. The stomach and small intestines exhibited a slight reddish tinge when held up to the light, but showed no signs of inflammation. The large intestines had a whiter or bleached appearance. There was no unusual dryness of the peritoneum. The whole canal was filled with the peculiar liquid matter which constitutes the evacuations in this disease. This was generally in large quantities, of a dirty greyish white color, though in one case tinged with green, and of a flocculent appearance; sometimes quite thin, sometimes as thick as thin hasty pudding. It resembled gruel which has not been sufficiently boiled, or coagulated milk, the curd of which has been very finely broken up. Similar evacuations are occasionally witnessed in severe cases of common bowel complaints. Not a particle of fecal matter, or matter colored by bile, was noticed in any case, unless indeed the green color just mentioned was occasioned by the presence of bile. The gall bladder always contained bile, and its duct was pervious.

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* Dr. Morell, of the Bellevue Hospital, informed us, that of the first twenty fatal cases all were examined after death.

It is a matter of some interest and importance to determine whether we have any reason for believing, as some have done, that the spasmodic or malignant cholera is merely a more intense form of common cholera morbus, and is produced by an accumulation and concentration of the ordinary causes of the latter disease. That they have many symptoms in common, is not to be denied. It is quite certain that the common exciting causes of cholera morbus, such as irregularity and excess in eating or drinking, great fatigue and exposure, may also operate as exciting causes of spasmodic cholera. But, on the other hand, the course which the complaint takes, and the character of the symptoms in which it terminates, render it probable that there is, previous to these exciting causes, some peculiar predisposition of an unknown nature existing in the constitutions of the whole population where it prevails. Our common cholera, in some cases, reduces a patient to a state of great and irrecoverable exhaustion. It is accompanied by severe cramp, cold extremities, weak and fluttering pulse, ending in death. Yet, in a parallel state of exhaustion, is the aspect of the subject the same? Do the peculiarities of complexion, the state of the extremities, and the character of the evacuations, correspond? In common cholera, also, the exhaustion seems to be commensurate with, and to be produced by, the vomiting, purging and spasms; in the spasmodic, on the contrary, there is no such correspondence. The most rapidly fatal cases are not always those in which the vomiting, purging and spasms have been the most violent. Some individuals fall into the state of collapse almost at once, after but a short continuance of the symptoms which usually precede it.

It is desirable also to determine whether it be possible, in the earlier stage of spasmodic cholera, to distinguish it with certainty from an attack of the ordinary disease; to determine, for instance, in a place where cholera was not prevailing, that a case attended by vomiting, purging and spasms, was or was not the commencement of the epidemic. I fear the practitioner must wait for the symptoms attending the stage of collapse, before he can feel authorized to pronounce with certainty. In forming our judgment in such a case, we are to be chiefly governed by the state of the skin and pulse, and by the character of the evacuations. When the skin continues full of red blood, after considerable vomiting and purging; when the pulse remains full and of tolerable volume, and the extremities warm; when also the evacuations have a fecal or bilious appearance, one could hardly be mistaken in regarding the case as one of common cholera. Where, on the contrary, the pulse becomes quickly small and weak, with a dirty, dingy and bloodless skin, cool extremities and dejections of a light flocculent character, one would readily suspect spasmodic cholera ; yet we surely see many such cases which the event, in ordinary seasons, proves to be nothing more than the common disease. Still, in such a case, if the malignant disease were either prevailing or expected, a physician could give no other than a doubtful opinion as to its character.

It did not appear, from such observation as was made of the effect of remedies, that any material variation was produced in the rate of mortality in cholera by the measures employed. This indeed seemed to be the general impression of those engaged in the management of the disease. And, it may be asked, has not this been the result, wherever it has prevailed, so far as we can judge from the reports of cases and deaths which we find in various publications ? We have had, it is true, many flattering recommendations of peculiar plans of treatment, and general statements of their efficacy ; but does not the general uniformity of the returns of dead and convalescent, in different places, satisfactorily show, that the good effects of remedies have chiefly existed in the imaginations of those who have employed them? The probability is, that this epidemic, like all others, varies in severity in different places. This accounts for the apparently greater success of that method of treatment which happens to have been employed where the disease has been mild. So, too, when it first makes its appearance in a new spot, it seizes on the worst constitutions, and on persons most strongly predisposed ; and hence its great and appalling mortality. After a while it attacks individuals of better constitutions, and who are less strongly predisposed ; these make a more determined resistance to the disease, and recover perhaps in a greater proportion. Hence, towards the close of the epidemic, the cases seem to be more tractable, and to be more under the influence of remedies.

How can we, except by means of some such explanation as this, account for the apparent success which has attended modes of management the most opposite in their character, unless we believe the statements which are made to be wholly without real foundation, and to have had their origin in the want of accurate observation, the self deception, or the wilful misstatement, of their authors ? Many physicians are loose observers, many are loose reporters, and some are both. I know not in what other manner we can account for the assertion of Broussais, that he loses but one patient out of thirty, while all his medical brethren are losing half, or very near it. One might expect, if his statement were actually true, that public opinion would soon force the whole faculty to the adoption of a method of management so successful ; and that a Paris mob might imagine the physicians of all the hospitals, except that of the Val de Grace, engaged in the combination to poison the people—since in the latter the patients all came out alive, and in the former all dead.

It is unquestionably a humiliating confession to the medical art, that fifteen years' experience has not taught us any mode of arresting the destroying progress of this disease. Yet, if it be true, it is better that we should know and acknowledge it; since then, instead of being distracted by the claims of opposite and contradictory statements, we shall direct our attention to the devising of new methods of treatment, or at least to means of prevention. The plague, which was once the scourge of Europe, is no more within the control of medicine, than it was centuries ago ; but it has been banished from countries which it once visited, by preventive measures. The same is true of yellow fever, and the same may be found true of cholera.

According to this view of the subject, the treatment of cholera cannot yet be reduced to any fixed rules, but must be, in the main, tentative or experimental. It is not the intention of the writer, in speaking of means of treatment, to offer any opinion as to their probable efficacy, but merely to direct the attention to such as appear worthy of a *very thorough* trial; for it is obvious that only the *very thorough* trial of a remedy gives it any fair chance of success in a disease like this.

We may also remark, that the rapid course taken by this disease does not allow us to place dependence on remedies which require time to produce their effect. Our whole range is confined to a very few hours. Except, therefore, in the premonitory stage, we must confine ourselves to means which operate almost immediately.

We should also bear it in mind, in treating cholera, that, in all cases of violent action or of extreme want of action, the susceptibility of organs to the influence of remedies is either very much exalted, or very much diminished; generally the latter. Thus in fainting from excessive hemorrhage, great quantities of stimulus are required to produce an effect, and they must be frequently repeated in order to keep up the effect. Large doses of laudanum are also borne without the production of its usual operation. The same is true of any violent pain, and of excessive secretions. The power of the medicine given, is neutralized by the disease. Thus a man with diabetes will bear twenty or thirty grains of opium in a day; and one with severe colic, two or three hundred drops of laudanum in a few hours.

It should also be premised, that the remarks made with regard to treatment refer to the confirmed state of the disease, that, viz. in which its peculiar character is fully developed. There is a premonitory or preparatory stage, in which the state of the system and the symptoms of disease are different, and require different management. It is not, however, in this stage that patients are generally seen in hospitals, nor usually in private practice; but it is in this stage that many physicians are so sanguine with regard to the effects of remedies.

Whatever be the variety of internal means recommended by different practitioners, they almost uniformly agree in the propriety of external warmth and stimulus; and in all diseases attended by coldness and want of action in the surface and extremities, the restoration of warmth and circulation is one of the first objects which suggests itself. In cholera, this is very strongly called for, since not only are the external parts cold and inactive, but, as some assert, the internal also. More proof, however, is required of the coldness of the internal organs than has yet been given: there are circumstances which render it doubtful, and it is a point which should be carefully investigated. Still, no doubt can exist of the coldness of a considerable part of the mass of the body.

Now it is very true, that this coldness is one of the consequences of the morbid condition on which the disease depends, and not the morbid condition itself, and that removing this effect will not prove a remedy for its cause. Yet it is also true, that many of the secondary effects produced by disease, are an obstacle to the removal of the disease, and obstruct the salutary efforts of nature or the influence of remedies. We often assist nature, and art also, in the struggle with the primary cause of disease, if we can artificially remove or suspend these secondary effects. Thus we assist the cure of dyspepsia by neutralizing the acid generated in the stomach as a consequence of this disease. So, too, where the system is sinking from a poison which operates by a suspension of that influence of the brain, which is necessary to respiration, if artificial respiration be kept up for a sufficient time, the effect of the poison ceases, and life is preserved. Something like this may be true with regard to the power of maintaining the animal heat in cholera. The reduction of the temperature of a large portion of the body and circulating fluids, for several hours, would alone be sufficient to cause death, were the system otherwise capable of struggling with and overcoming that internal state in which the disease consists. If a man, with the ordinary power of maintaining animal heat, were exposed to a degree of cold which should reduce his temperature to 75 degrees, this reduction alone would soon destroy life. This often happens in cases of shipwreck and exposure at sea, where persons are chilled to death by immersion for a long time in water at a low temperature. The patient with cholera is placed in circumstances somewhat similar. His power of resisting cold being lost, he is cooled down by an ordinary atmosphere as much as a healthy man by the low temperature of the ocean.

A resemblance has been supposed to exist between the patient with cholera and an individual frozen by exposure, and it has been recommended to employ in the former the same treatment as in the latter case. But the resemblance is not so close as that which has been already suggested. In persons frost-bitten, the external parts are actually frozen; or at any rate reduced to a much lower temperature than those cholera patients, whilst the internal parts retain their powers of resistance. This at least is true of recoverable cases. Although the temperature to which the surface is reduced is much lower, yet the whole body has not been equally cooled, and the heat providing powers not equally exhausted. No one would think of dashing cold water, or rubbing melting snow, over the body of a man chilled by immersion in cold water, to restore his animal heat; neither is it probable that this measure would be attended by any beneficial result in cholera.

We may regard it, then, as an essential part of the treatment of cholera, whatever means we may otherwise employ, that warmth of the body should be restored by external heat, and its activity promoted by external stimulants. It is by no means a matter of small importance by what agents we effect this. Let us recollect what we are to accomplish, viz. to warm through a solid mass of flesh. In order to impart heat, we must in the first place surround the body with bad conductors, which will retain the heat which is communicated to it, viz. with blankets, rugs or comforters. We must, in the next place, apply, within these, substances which contain a good deal of heat, and which will give it out readily to the body; such as bottles of hot water, hot bricks, billets of wood, bags of sand, &c. &c. We may see at once how insufficient air baths must be, as indeed they have been found. Air is a slow conductor, and contains but little heat. How long would it take to raise the temperature of a dead body twenty degrees in an air bath? I suspect many hours. Hot air may warm the skin readily; but in cholera we must go deeper than this—we cannot rely on the heat-making power of the system to aid us in our endeavors—we must use means which shall extend as far as the coldness extends. Neither can we expect any amount of external covering alone to raise the temperature of the body. Blankets assist in the accumulation of heat, when the body is capable of generating it; but they in no degree tend to warm it, when it has not this power. They could never warm a drowned man who had ceased to breathe.

The consideration that the heat-producing power is suspended in the cholera patient, should lead us to be cautious in relaxing the application of external warmth. It is not sufficient that the patient feels warm ; the means should be persevered in, till a decided reaction has taken place, indicated by the state of the pulse, countenance and respiration, and should even then be cautiously relaxed. Neither should these measures be delayed till the patient is actually cold, when the stage of collapse is coming on. The loss of heat should, as much as possible, be prevented, by a great abundance at least of external covering, if not the application of absolute heat.

At the same time that the external warmth is thus provided for, it is important that the means used should not in some measure defeat their own object, by depriving the patient of fresh and cool air. Any imperfection of respiration, essentially impedes the keeping up of the animal temperature ; and both foul air and warm air, are productive of such imperfection. We should be cautious, therefore, that the rooms of cholera patients be not unduly heated, and that an abundance of fresh air should always have access to them.

External stimulation seems indicated, as next in importance to external warmth. This might be effected in various ways ; but none seems more speedy and certain in its operation, than the poultice, or plaster of flour of mustard and vinegar. How extensively it might be proper to apply this, experience only can teach us. Few, even of cholera patients, are for any long time insensible to its effects.

A powerful, and, it is believed, a new method of exciting reaction by external application, has been adopted by Drs. Lee and Ree, at one of the New York Hospitals, and, as has been stated, with remarkable success. It consists in the friction of the whole surface of the body, when in the state of collapse, with an ointment, composed of mercurial ointment, camphor and capsicum. Very little else is done, and nothing but a small quantity of drink, or of ice, given internally. We shall no doubt derive, ere long, a full account of the particulars of this mode of practice, and of the success which has attended it, from these enterprising physicians themselves ; and it would be premature to give, at the present time, anything more than this general statement. It is certainly, however, one of the measures which deserve a thorough trial from those engaged in the treatment of cholera.

But little can be said of internal remedies. The general impression seems to be, both at New York and in Canada, that in the confirmed disease, nothing has as yet produced any very decidedly favorable effect, although all methods of practice have been tried ; the calomel practice, the bleeding practice, the ultra-stimulating practice of spotted fever, the moderately stimulating practice, the camphor practice, and the ice practice. Still, we are hardly ready to give up in despair, and may inquire, whether it may not still be worth while to go over the ground again with some of these measures, unless we should be so happy as to escape a visit from this disease. The measures to which it might be desirable to give this trial, would be,—

1. The highly stimulating practice of Drs. Miner and North, by means of immense quantities of opium, brandy, capsicum and essential oils. So far as tried, this course has been said to be attended with unfavorable effects. Might it not bear a fairer chance of success, if combined with the injection of a saline solution into the veins ? It may be, that these stimuli fail of their accustomed effect, from the want of a sufficient amount of circulating fluid.

2. The mercurial practice, carried to the greatest possible extent, both

internally and externally. Dr. Chisholm administered immense quantities of mercury to his yellow fever patients ; one patient having used over 5000 grains, and many having actually taken more than a thousand grains by the mouth. We might do the same in bad cases of cholera, at least without danger ; and besides the administration of calomel by the mouth, and frictions, we might also make use of mercurial fumigations continued for a great length of time, a whole day for instance, which would not only act mercurially, but would also assist in raising, or at least in maintaining when raised, the animal heat.

3. The administration of ice internally, according to the method of Broussais. Though not placing unqualified reliance on the accounts given by this teacher of his practice, and believing him to be much wanting either in accuracy or in sincerity and good faith, the peculiar circumstances in which we are placed with regard to the management of cholera, renders it our duty to employ all those means for which very decided success has been claimed.

4. Bleeding from the general circulation. It is remarkable that no remedy has been more strongly recommended than this, in works on cholera as it has elsewhere prevailed ; and yet that no decided success has followed its employment in this country, so far as we have any evidence. Still we are led to believe, such is the authority on which it has been recommended, that there may be states of the disease in which it will be followed with advantage.

5. Injection of large quantities of warm water, or of a warm saline solution, into the veins. So far as we have been informed, the immediate effect of this measure has been to restore the circulation and warmth of the patient ; in fact, to rouse him from the state of collapse. Of its final success, we know less. It is remarkable that, of all the cases mentioned in a late communication in an English Journal, and republished in the Boston Medical and Surgical Journal, we are not told of the result of a single case. It was employed in the case of a patient at the Bellevue Almshouse, at New York, by Drs. Morell and Baker, and twenty-four ounces of warm water were introduced into the veins. The immediate effect was highly promising, but relapse and death ultimately took place. We have been since informed that an instance of complete recovery has followed the saline injection, in the Crosby Street Hospital, under the care of Drs. Rhinelander and Dekay. Measures which afford even a temporary revival should, in this disease, be seized on with eagerness. If therefore the injection into the veins proves to be as effectual in the promotion of a temporary reaction as has been asserted, it may answer a valuable purpose by prolonging life, and thus affording time for the operation of other remedies, even if it should not be sufficient for the preservation of the patient. Like external heat, therefore, its employment should be cautiously combined with that of all the other remedies in different cases ; since we may, perhaps, arrive at that success from the judicious combination of means, which we seek in vain from perseverance in any single course.

Sickness at the State Prison in Charlestown.—A disease broke out very suddenly among the convicts at this place on Sunday afternoon last. We copy the following from the Boston Transcript of Monday evening.

Our correspondent of the Bunker Hill Aurora writes us under date 1 o'clock, P. M. :

"A sickness commenced at the State Prison in this town yesterday afternoon. At half past 12 o'clock, last night, 25 had been attacked severely, with vomiting and purging, but no spasms of the extremities. The number of cases has continued to increase, and there are now 104 sick—many of them, however, are in a state of convalescence. The patient most sick is pronounced to be improving. There have been NO DEATHS; and the general opinion of our own and of the Boston physicians appears to be, that the disease is NOT the *Asiatic Cholera.* A Board of consulting physicians has been appointed, and also a committee of physicians to analyze the food and drink taken by the convicts yesterday."

The Inspectors of the prison visited it this morning, in company with the consulting and other physicians of the City and Charlestown. We learn that the physicians are of opinion that no case exists that is likely, from present appearances, to terminate fatally.

The Cholera.—The disease, in the city of New York, has much abated. The number of new cases and deaths on each day, since our last report, has gradually diminished, and on Friday last the former was 90, and the latter 24; on Saturday, cases 88—deaths 30. Drs. Arnold, Nelson, and Vought, have died of cholera in New York.—In Albany, the epidemic appears to have increased. On the 28th ult. there were 28 new cases and 18 deaths; on the 29th, 35 cases and 17 deaths; on the 30th, 26 cases and 10 deaths.—In Brooklyn, L. I. on the 1st inst. 35 cases and 7 deaths.—Cases have occurred in many towns on and near the Hudson river.—In Philadelphia, whole number of cases from the 27th July, 144; deaths 60.—In Providence, R. I., 4 cases have occurred.—The disease has broken out in another family in Newport, R. I. Mr. Foster, the father of the family, buried the two young ladies who died of cholera ten days since. After the interment, he returned home and slept with a child, who was taken sick on the 3d inst. and died the next morning. A few hours after the death of the child, the mother was seized in a violent and suspicious manner, and expired before 10 o'clock on the 5th. Another child has been taken, but is now convalescent. A few days after the interment referred to, Mr. F. was himself attacked with violent vomiting, &c., but his disease rapidly yielded to medicine.—The disease has also appeared in Norfolk, Va.—Boston still continues healthy.

NOTICE.—It was the intention of the Publishers of the Medical Journal, at the request of a number of subscribers, to have discontinued the plan, adopted the last year, of dividing the work into two volumes annually, and to have restored the original form of a single volume in a year. The call for the numbers of this volume, however, has been so much greater than was anticipated, that many of them are entirely taken up, so as to render it impossible to furnish the volume entire to any future applicants. In consequence of this, the 6th volume will close with the present number, and the next will begin volume 7. The title page and index will be sent with a future number.—A continuance of the favors of the profession, both as subscribers and contributors to this work, is respectfully requested.

The important nature of the communication respecting the Cholera in New York, has induced us to give it an insertion, entire, to the exclusion of the editorial matter prepared for this number. The proposed remarks on the management of the premonitory symptoms of the disease, by the same writer, will be thankfully received.—The interesting Case by Dr. A. of N. H., and Prof. T.'s Experiments, together with other favors, will receive early attention.

Whole number of deaths in Boston for the week ending Aug. 4, 25. Males, 12—Females, 13. Stillborn, 1.

Of scarlet fever, 5—delirium tremens, 1—consumption, 5—debility, 1—typhus fever, 1—scrofula, 1—dropsy, 1—liver complaint, 1—lung fever, 1—palpitation of the heart, 1—drowned, 1—intermittent fever, 1—intemperance, 2—throat distemper, 1—abscess, 1—paralytic, 1.

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The New England journal of medicine